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OEDIPAL DYNAMICS IN PROJECTIVE DRAWINGS AND SPONTANEOUS VISUAL IMAGERY

By

Eric J. Dammann

A DISSERTATION

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ABSTRACT

OEDIPAL DYNAMICS IN PROJECTIVE DRAWINGS AND SPONTANEOUS VISUAL IMAGERY

By

Eric J. Dammann

This study examined Oedipal dynamics in human figure drawings and spontaneous imagery, as well as gender differences in these dynamics. Sixty college students were each tested in the following three conditions; first, they draw four objects (mother, father, person of the opposite gender, and an automobile); upon completing each drawing, participants engaged in a period of "free" drawing, during which they were instructed to draw "whatever comes to mind." Finally, a week later participants were asked to "touch-up" their drawings, and then visualize them and report whatever spontaneous images occurred.

Using Freud's topographic theory to supply the core theoretical commitments, it was hypothesized that the four stimulus objects (auto, opposite gender, mother, father) would generate different degrees of conflict between wish and defense due to their remoteness or closeness to the Oedipal object. It was expected that for males, drawing the mother would be especially conflict-inducing due to the threat of castration for incestual wishes. The opposite gender drawing was expected to generate

less conflict than the Oedipal object, but, because they can be a "stand-in" for the Oedipal object, should still be conflict inducing. The father drawing, being even more remote from the Oedipal object, should generate less, and finally, the automobile, because it does not involve a human body, was expected be the least conflict-inducing. For females, the "expected order of conflict" was the same, expect that the father was predicted to generate the most conflict.

Data from a number of sources throughout this investigation lent impressive support to Freud's topographic and Oedipal theory. Specifically, the "expected order of conflict" was found for levels of libidinal intensity, castration anxiety, derivative formation, and levels of displacement, as well as for the relationship between variables of opposed processes (repressive vs. anti-repressive forces). For males, of the 10 tests to which the expected order was submitted, 6 were successful ($p < .001$). Furthermore, for males, indications for an increase in conflict as Oedipal wishes are intensified was also evident. Finally, theoretically consistent gender differences in these dynamics were also found.

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DEDICATION

The following dissertation is dedicated to Christine and our beautiful children, Jackson Ryan and Allison Noelle.

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The completion of this dissertation would not have been possible without the help of a number of people. First and foremost, I would like to thank my chairperson, Dr. Joseph Reyher. Throughout my graduate career Joe served as a mentor and friend. As both teacher, researcher, and supervisor, he has influenced my development as a psychologist more than anyone else. Furthermore, his effort on behalf of this dissertation went beyond the call of duty, and his dedication and enthusiasm were greatly appreciated.

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INTRODUCTION

Since Freud first outlined the central tenets of psychoanalytic theory (his "metapsychology"), debate has centered on both its validity and its usefulness. Depending on one's leanings, Freud's theories of the mind have come to represent either absolute truth or a metaphorical fabrication, even inside analytic circles. Furthermore, there has been disagreement among analysts as to what exactly constitutes Freud's "metapsychology" (see, for example, Rappaport & Gill, 1959), although most agree that it includes the core assumptions and ideas contained in his so-called "metapsychological papers" (in The Collected Papers of Sigmund Freud, Vol. 4 [1949]) and chapter 7 of The Interpretation of Dreams (1900/1955).[1]

In the nearly 100 years which have elapsed since these were first published, there have been many attempts to validate empirically Freud's ideas (see Kline, 1972; Fisher & Greenberg, 1977/1985; 1996). However, careful scrutiny of this corpus of literature finds that most of the studies which have purported to test Freudian theory have done so by using methods or instruments which are so removed from the theory that they do not allow for a true test. As but one example, many studies have used self-report measures (e.g., Kuppusawmy, 1949), which clearly are not valid if

[1] Many of these ideas are also summarized in the Introductory Lectures on Psycho-analysis (1920/1963).

one takes Freud's assumptions regarding repression, denial, and other defense mechanisms into account.[2]

The following study therefore set out to study a central aspect of Freudian personality theory, namely Oedipal theory, and do so in a manner that can be derived directly from Freud's metapsychology, specifically his so-called "topographic theory" (see below). This study limited itself to topographic theory for two reasons; first, topographic theory remains one of Freud's most complete theoretical formulations, and second, research by Reyher and associates has found topographic theory to be a valuable heuristic in the laboratory. Specifically, topographic theory gives a better account of both disguised wish-fulfillment and derivative formation than do Freud's other theoretical formulations.[3] The research of Reyher and his associates (discussed below) has focused on human figure drawings and non-directed ("spontaneous") imagery as mechanisms for assessing disguised wish-fulfillment and derivative formation, and recently Reyher has reevaluated many of the findings pertaining to figure drawings using Freud's topographic theory as a scaffolding to understand the sometimes disparate results. Before examining that research program, however, a brief discussion of Freud's metapsychology and Oedipal theory as it applies to this study is warranted.

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[2] As Blum (1949) stated: "If the theoretical framework of psychoanalysis is based upon such subtle concepts as repression, reaction formation, denial, and the like, it would appear irrelevant to attempt an appraisal of the theory by a technique which makes no allowance for these very concepts!" (p. 12.)

[3] Due to Freud's long and productive career, many of his most fundamental ideas went through significant changes. Therefore, to simply state that one is going to test "Freudian theory" is meaningless, as there are many "theories" within Freud (e.g., structural theory vs. topographic theory). In fact, Reyher (1989) has found at least 26 models of the psyche in Freud's writings.

Relevant Freudian theory

According to Freud's (1900/1955) earliest systematic theory of the mind, which has come to be know as the "topographic theory" (see Arlow & Brenner, 1964), the psychic apparatus consists of three "systems," characterized by their relationships to consciousness. The "system unconscious" (Ucs.) is made up of those elements of mental life which are primarily inaccessible to consciousness. The "system preconscious" (Pcs.) is made up of those elements of mental life which, although not necessarily in consciousness, are readily available to consciousness.[4] Finally, the "system conscious" (Cs.) consists of those elements of mental life which are conscious.

Another major difference between these systems is that the mental elements of the Ucs. act according to what Freud called the "primary process" (1915a/1949) while the Pcs. and Cs. act according to the "secondary process." The main goal of the primary process (so named because it represents the most primitive and earliest mode of mental functioning) is to discharge mental energies without delay, leading to "gratification." Freud (1915a/1949) notes other characteristics of the Ucs. and primary process:

> The kernel of the system Ucs consists of instinct-presentations whose aim is to discharge their cathexis; that is to say, they are wish-impulses. These instinctual impulses are co-ordinate with one another, exist independently side by side, and are exempt from mutual contradiction... There is in this system no negation, no dubiety, no varying degree of certainty... Intensity of

[4] Freud initially described these two systems as the first and second "ψ-systems" (1900/1955).

> cathexis is mobile in a far greater degree in this than in other systems. By the process of displacement one idea may surrender to another the whole volume of its cathexis; by that of condensation it may appropriate the whole cathexis of several other ideas. I have proposed to regard these two processes as distinguishing marks of the so-called *primary process* in the mind. (italics in original, p. 119)

Thus, the Ucs. acts according to what Freud calls the "pleasure principle" (1911/1949), meaning that these processes strive toward gaining pleasure without taking into account issues concerning feasibility, morality, etc. Freud (1920/1963) states that "pleasure" refers to the "... diminution, reduction, or extinction of the amounts of stimulus prevailing in the mental apparatus, and that simultaneously unpleasure is connected with their increase" (p. 443).

The systems Pcs. and Cs., on the other hand, act according to the "secondary process" and the "reality principle." Freud (1920/1963) describes the reality principle as follows:

> The ego discovers that it is inevitable for it to renounce immediate satisfaction, to postpone the obtaining of pleasure, to put up with a little unpleasure and to abandon certain sources of pleasure altogether. An ego thus educated has become 'reasonable'; it no longer lets itself be governed by the pleasure principle, but obeys the *reality principle*, which also at bottom seeks to obtain pleasure, but pleasure which is assured through taking account of reality, even though it is pleasure postponed and diminished. (italics in original, p. 444)

The "secondary process" refers to those mental functions such as logic,

reasoning, etc., which make up our day to day conscious experience.

As described above, Freud believes that the mental elements in the Ucs. consist of non-verbal memory traces, and typically are made up of "wishes" comprised of sexual instincts which have a certain allotment (cathexis) of sexual energy, which he calls libido.[5] These instincts, which are constantly pressing for discharge, are not typically allowed free reign due to the reality principle. In fact, according to Freud there exists an "intersystemic censor" which lies (figuratively speaking) between the Ucs. and the Pcs.; this censor can block "objectionable" (e.g., incestual) mental elements in the Ucs. from gaining passage into consciousness: "In the first phase the mental act is unconscious and belongs to the system Ucs; if upon the scrutiny of the censorship it is rejected, it is not allowed to pass into the second phase; it is then said to be 'repressed' and must remain unconscious" (Freud, 1915a/1949, p. 105). But why, one may ask, would an impulse be repressed? Freud (1915b/1949) states: "For this to happen, obviously a necessary condition must be that attainment of its aim by the instinct should produce 'pain' instead of pleasure" (p. 84). These unpleasurable feelings were elsewhere described as a "traumatic state" which occurs when the ego is overwhelmed by excitation-- this is subjectively described as "anxiety" (Freud, 1900/1955; see also 1926/1936).

---

[5] Freud (1905/1949) defines libido as: "... a quantitatively variable force which could serve as a measure of processes and transformations occurring in the field of sexual excitation" (p. 94). He later described it as "...the energy, regarded as a quantitative magnitude (though not at present actually measurable), of those instincts which have to do with all that may be comprised under the word 'love'" (1921/1955, p. 90).

The motivation for repression comes from a number of sources. Prior to the introduction of the superego and the tripartite model of the mind, dubbed by later theorists the "structural theory" (see Arlow et al., 1964), Freud believed that libidinal impulses undergo repression if they "...come into conflict with the subject's cultural and ethical ideas" (1914/1949, p. 50). Furthermore, Freud believed that "internal standards" could lead to repression. The source of these internal standards is the "Ego Ideal", an "ideal" image of ourselves against which we are constantly measuring our actual ego. This ego-ideal, built out of parental criticism and the remnants of infantile narcissism, is also an important motivator for repression: "From the point of view of the ego this formation of an ideal would be the condition of repression" (1914/1949, p. 51). Therefore, in topographic theory the ego-ideal may be thought of as the seat of repression: "The ego-ideal has imposed severe conditions upon the gratification of libido through objects, for, by means of censorship, it rejects some of them as incompatible with itself" (1914/1949, p. 58).

Following repression, the idea associated with the instinct-presentation (wish) is said to be unconscious. The affect associated with this wish, however, has a separate fate. Freud (1915c/1949) describes a number of possible vicissitudes in this regard, but perhaps the most important fate of this repression is the transformation of affect into anxiety (Freud, 1915b/1949). In fact, Freud (1915a/1949) calls anxiety the "... substitute for all 'repressed' affects" (p. 112), and later said that "Anxiety

is therefore the universally current coinage for which *any* affective impulse is or can be exchanged if the ideational content attached to it is subjected to repression" (1920/1963, italics in original, p. 502).[6]

Aside from transforming into anxiety, Freud (1915b/1949) believes that the libido that is decathected from a wish becomes "mobile"; following this decathexis the freed libido can become "dammed up" or can be displaced onto a substitute or derivative (1915a/1949). Freud (1900/1955) notes that displacement is used "...to escape the censorship imposed by resistance" (p. 308). For example, with regard to the sexual instincts Freud (1905/1949) believes that any part of the skin or body can function as an erotogenic zone, and other parts of the body can engage in sexual activity (i.e., become erect-- see Freud, 1916/1949). In fact, according to Freud just about anything can serve as a derivative and a means for escaping detection by the censorship, as long as the derivative sufficiently disguises the prohibited wish. Freud (1915b/1949) states: "If these derivatives are sufficiently far removed from the repressed instinct-presentation, whether owing to the process of distortion or by reason for the number of intermediate associations, they have free access to consciousness. It is as though the resistance of consciousness against them was in inverse proportion to their remoteness from what was originally repressed" (p.88). For example, Freud (1900/1955) describes how the

[6] It should be pointed out that Freud's ideas concerning the role of anxiety went through numerous, and fundamental, changes. For example, in 1900/1955 and 1915a/1949 he discussed the role of "signal anxiety," an idea similar to his later reformulation of the role of anxiety in 1926/1936, during which anxiety served as a signal for repression, instead of being an outcome of repression.

"day's residue" (everyday events from our waking lives) is used in the formation of dreams:

> The unconscious wish links itself up with the day's residues and effects a transference on to them... A wish now arises which has been transferred on to the recent material; or a recent wish, having been suppressed, gains fresh life by being reinforced from the unconscious. This wish seeks to force its way along the normal path taken by thought-processes, through the Pcs. ... to consciousness. But it comes up against the censorship, which is still functioning and to the influence of which it now submits. At this point it takes on the distortion for which the way has already been paved by the transference of the wish on to the recent material. (p. 573)

In summary, then, the psychic apparatus allows unconscious wishes to seek out derivatives in the Pcs. as long as they escape detection by the censorship, thereby allowing for disguised gratification in the Cs. This whole process was summarized by Freud (1915a/1949) in his discussion of anxiety-hysteria:

> It consists in anxiety appearing without the subject knowing what he is afraid of. We must suppose that there was present in the Ucs some love-impulse which demanded to be translated into the system Pcs; the preconscious cathexis, however, recoiled from it in the manner of an attempt at flight, and the unconscious libidinal cathexis of the rejected idea was discharged in the form of anxiety. Then at some repetition of the process a first step was taken in the direction of mastering this distressing development of anxiety. The fugitive cathexis attached itself to a substitutive idea which, on the one hand, was connected by association with the rejected idea, and, on the other, escaped

> repression by reason of its remoteness from that idea.... (pp. 114-115)

Many of the foregoing ideas came from the study of dreams, which Freud believed were especially suitable media for expressing unconscious fantasies due to their symbolic and imagistic components. Drawing and spontaneous imagery are also considered good media for assessing this domain because they are also both plastic media which (like dreams) are therefore capable of expressing unconscious fantasies (Freud, 1900/1955).[7] As an illustration, Freud (1916/1949) describes how the wish/impulse can be expressed in three ways:

> It may be the way that would be normal in waking life, by penetrating from the Pcs into consciousness; or it may circumvent the Cs and find direct motor discharge; or it may take up the unsuspected way that observation nevertheless leads us to follow up... The process begun in the Pcs and reinforced by the Ucs pursues a retrogressive course, through the Ucs, to perception, which forces itself upon consciousness.... In this process thoughts are transformed into images, mainly visual; that is to say, verbal ideas are reduced to the ideas of the corresponding things, on the whole as if the process were controlled by considerations of *suitability for plastic representation*.. (italics in original, p. 142-143)

Based on this brief introduction to Freud's metapsychology, it is

[7] Although not well known, Freud used imagery in his clinical work, at least early in his career. For example, in The Interpretation of Dreams (1900/1955) Freud describes his treatment of a boy: "I began the treatment by assuring him that if he shut his eyes he would see pictures or have ideas, which he was then to communicate to me... In this case long-repressed memories and derivatives from them which had remained unconscious slipped into consciousness by a roundabout path in the form of apparently meaningless pictures" (pp. 618-619). Reyher's "Emergent Uncovering Psychotherapy" (see below) is based primarily on this phenomenon.

clear that any study that purports to test psychoanalytic ideas will need to account for such processes as repression, displacement, disguised gratification and derivatives, etc. Furthermore, methods which allow for derivative formation and use plastic media will be especially suitable. Unfortunately, as is evident in Appendix A, most experimental tests of psychoanalytic theory often fails this fundamental necessity.

The Oedipus Complex and Castration Anxiety

In examining Freud's clinical theory for possible areas to test, Oedipal theory, especially related to the castration complex, seemed especially appropriate. This is because the Oedipal theory has always been, and remains today, one of the cornerstones of classical psychoanalysis (for a good summary, see Nunberg, 1955). Furthermore, there has been a sizable corpus of literature on the empirical evidence for this theory, although the majority of it is problematic for many of the issues discussed above. Reviews of empirical studies of Oedipal theory can be found in Kline (1972) and Fisher and Greenberg (1977/1985; 1996). A review of the relevant empirical literature on castration anxiety is found in Appendix A.

The Oedipus complex is one of the most central, if often misunderstood, aspects of psychoanalytic theory. Freud himself said towards the end of his career that "... if psychoanalysis could boast of no other achievement than the discovery of the repressed Oedipus complex,

that alone would give it a claim to be included among the precious new acquisitions of mankind" (1940/1964, p. 193). Freud's follower and biographer Ernest Jones stated that the Oedipus complex was "...the most characteristic and important finding in all psychoanalysis..." (cited in Healy, Bronner, & Bowers, 1930, p. 129), and Otto Fenichel, author of the seminal The Psychoanalytic Theory of Neurosis (1945), stated that it was not only the nuclear complex of the neuroses, but the "...nuclear complex of the unconscious of mankind in general" (1930/1953, p. 181). In a similar vein, Ferenczi (1912/1952) and Reich (1931) noted that, aside from its importance in the neuroses, the Oedipus complex also determines the most important character traits in "normal man."

Freud's thinking about the Oedipus complex spanned his entire career, and it is difficult to find examples of his writings in which this topic is not a least briefly mentioned. It appears that the first written record of Freud's recognition of the phenomenon which would be called the Oedipus complex is in a letter, dated October 15, 1897, to his friend Wilhelm Fliess (Freud, 1954). In this letter he discusses the play "Oedipus Rex," and how it gets its impact from the fact that the audience members can identify with the conflict experienced by Oedipus. Freud's first published use of the phrase "Oedipus complex" would come much later (1910a/1949), although he discusses the theme of it in The Interpretation of Dreams (1900/1955).

Because the Oedipus complex is different for males and females,

they will be discussed separately.

Males. At the end of his career Freud (1940/1964) summarized the Oedipal conflict as felt by a young boy:

> He wishes to possess her [mother] physically in such ways as he has divined from his observations and intuitions about sexual life... his early awakened masculinity seeks to take his father's place with her... His father now becomes a rival who stands in his way and whom he would like to get rid of. (p. 189)

During this developmental stage, also known as the "Phallic period" (from the ages of about 3 to 5) the boy's sexual interest is heightened, and he finds an outlet through masturbation. This, however, is often met with the disapproval of the parents, sometimes taking the form of a castration threat:

> When the (male) child's interest turns to his genital organ, he betrays this by handling it frequently and then he is bound to discover that grown-up people do not approve of this activity. More or less plainly, and more or less brutally, the threat is uttered that this highly valued part of him will be taken away. (Freud, 1924/1949, p. 270)[8]

Furthermore, because, according to Freud (1908a/1949; 1923/1949) boys

[8] A study by Huschka (1938) found that actual castration threats by parents were quite common in a group of "problem" children. Whether this remains true today is not clear, but Freud stated that even without direct threats of this nature, the castration complex could still be present: "...but it is highly improbable that children are threatened with castration as often as it appears in the analyses of neurotics. We shall be satisfied by realizing that the child puts a threat of this kind together in his imagination on the basis of hints, helped out by a knowledge that autoerotic satisfaction is forbidden and under the impression of his discovery of the female genitals" (1920/1963, p. 459).

at this age still assume that everyone else is like them, and therefore have a penis, the first sight of the female genitals can greatly enhance the nature of the castration threat.[9] Freud (1940/1964) summarizes:

> But if at the time of the threat he can recall the appearance of female genitals or if shortly afterwards he has sight of them-- of genitals, that is to say, which really lack this supremely valued part, then he takes what he has heard seriously and, coming under the influence of the *castration complex*, experiences the severest trauma of his young life. (italics in original, p. 190)[10]

Freud (1918/1949) also discusses other events which he believed led to the "reality" of castration: "The handing over of faeces (sic) for the sake of (out of love for) some one else becomes a prototype of castration; it is the first occasion upon which an individual gives up a piece of his own body" (p. 562); and:

> Psycho-analysis has recently laid fresh emphasis on two experiences which all children go through, by which it is thought that they became prepared for the loss of a valued part of the body-- the withdrawal from them of the mother's breast... and the daily demand made on them to give up the contents of the bowel. (1924/1949, p. 271)

This conflict puts the boy in a major dilemma, for during the phallic period the boy is said to have "identified himself with his penis" (Fenichel,

---

[9] It should be noted that later theorists, most notable Horney (1932), felt that it is improbable that the female genitals should remain undiscovered to the boy. She stated "... his phallic impulses surely bid him instinctively to search for the appropriate opening in the female body" (p. 354). The views of other psychoanalytic theorists concerning the castration complex is discussed in Appendix B.

[10] The first use of the phrase "castration complex" was in Freud's paper on the sexual theories of children (1908a/1949).

1945, p. 77). This narcissistic identification is due to the newly enriched sensations in this area during this period. In a sense, then, the boy must choose between his desire for his mother and the possession of his penis. Due to his narcissistic identification with his penis, he renounces or represses his love for his mother.[11] Therefore it is the castration complex which brings down the Oedipus complex: "The Oedipus complex is smashed to pieces by the shock of threatened castration" (Freud, 1925/1950, p. 196), although Freud (1924/1949) also acknowledges that "...the Oedipus-complex becomes extinguished by its lack of success, the result of its inherent impossibility" (p. 269). Freud (1926/1936) believes that castration anxiety is one of the two main types an anxiety, the other being separation anxiety.

As a result of the passing of the Oedipus complex, the boy turns from his mother and identifies with his father, and the superego, which incorporates his father's standards, is thus formed:

> The object-cathexes are given up and replaced by identification. The authority of the father or the parents is introjected into the ego and there forms the kernel of the super-ego, which takes its severity from the father, perpetuates his prohibition against incest, and so insures

[11] Although Freud felt that it was primarily fear of the father that was foremost in castration anxiety, he did mention in some of his case studies that it was the mother who threatened castration (e.g., Freud, 1909a/1949; 1918/1949). However, he states that: "The threats or hints of castration which he had come across had, on the contrary, emanated from women, but this could not hold up the final result for long. In spite of everything it was his father from whom in the end he came to fear castration" (1918/1949, p. 565). In order to explain this he incorporates his theory about a "phylogenetic fantasy" (see below): "In this case respect for heredity triumphed over accidental experience; in man's prehistory it was unquestionably the father who practiced castration as a punishment and who later softened it down into circumcision" (1918/1949, p. 565). Empirical research by Karon (1964; 1970) and Shill (1981a), however, has found evidence that the mother is also viewed in fantasy as the castrator. Furthermore, Schill (1966) found gender differences in this regard; males tended to see the father as the castrating agent, while females tended to see the mother. These studies are all discussed in Appendix A.

> the ego against a recurrence of the libidinal object-cathexis. (1924/1949, p. 273)

Females. According to Freud, this process is quite different in girls, although his writings on female sexuality are not nearly as clear or as extensive as his writings on male sexuality, as he himself acknowledged, stating that they were "... incomplete and fragmentary..." (1933/1964, p. 119). In fact, Freud's notions concerning female sexuality remain some of his most controversial ideas, and have been refuted by other analysts perhaps more than any other theoretical formulations. This study, in an effort to remain faithful to Freud's theories, will follow from Freud's original hypotheses, albeit with no preconceived notion as to their validity. A summary of some dissenting views on female sexuality can be found in Appendix C.

Freud wrote essentially three papers which concentrated on female sexuality (1925/1950, 1931/1950, and 1933/1964, chapter 5). Basically, Freud believes that initially the little girl is like a little boy, and derives pleasure from the clitoris as a boy does from the penis. At some point, however, the little girl sees a boy's penis and "... at once recognizes it as the superior counterpart of their own small and inconspicuous organ, and from that time forward fall a victim to envy for the penis" (1925/1950, p.

190).[12] Freud believes that this discovery leads to a break in the girl's relationship with her mother, because: "... it can be seen that in the end the girl's mother, who sent her into the world so insufficiently equipped, is almost always held responsible for her lack of a penis" (1925/1950, p. 193). This turning away from the mother sets the stage for the major difference in the Oedipus complex between girls and boys. Basically, girls are hypothesized to go through one additional developmental step involving the transfer of love from the mother (the original object) to the father. This occurs because (aside from her hostility toward the mother) the girl eventually gives up her wish for a penis, and "... puts in place of it a wish for a child: and *with this purpose in view* she takes her father as a love-object" (italics in original, 1925/1950, p. 195). She then looks to her father for the love and attention she used to get from her mother (Freud, 1933/1964). Hereafter, the positive Oedipus complex takes the same course as in boys, except that with a lesser castration anxiety (as the supposed castration has already taken place) Freud believes that there is less motivation to give up the libidinal cathexis toward the father and therefore form the superego.

As is evident, according to Freud the relationship of castration anxiety to the Oedipus complex is quite different in boys and girls. In

[12] Rangell (1991) notes that envy of the other sex is by no means strictly a feminine phenomenon: "In discovering bisexuality, Freud described four sexual psychologies in the two human genders of man/woman. One of the four, the female envy of the male, has been unduly lifted out over the others, politicalized and descientificized" (p. 21; see also Bettelheim, 1962; Jaffe, 1977). Evidence from clinical material using Emergent Uncovering Psychotherapy (Reyher, 1978) has documented repeatedly the importance of male "envy" of the female genitalia.

girls, the castration complex creates the Oedipus complex, while in boys this is reversed: "In girls the Oedipus complex is a secondary formation. The operations of the castration complex precede it and prepare for it...*Whereas in boys the Oedipus complex succumbs to the castration complex, in girls it is made possible and led up to by the castration complex.*" (italics in original, Freud, 1925/1950, p. 195). Therefore, due to the lesser significance of castration anxiety in girls, something else is necessary for the resolution of the Oedipus complex. Fenichel (1945) summarizes Freud's views:

> In girls, however, it is given up because of fear over loss of love... because of disappointment, shame, and also fear over physical injury. All of the forces are of a lesser dynamic value than castration fear; thus the passing of the Oedipus complex in girls is generally comes about in a more gradual and less complete way. (p. 108)

Thus, for both males and females the castration complex comes from many sources, including the following: actual threats for masturbation, the sight of the female (and male) genitals, pregenital deprivations (including the loss of feces and the breast), fear of retaliation for incestual wishes, and phylogenetic fantasy. The phylogenetic fantasy, as described by Freud (1913/1953), concerns his belief in the inheritance of ancestral experience, in this case regarding the "primal horde."[13] Freud speculated that in primitive societies the father, who bans his sons from sexual gratification,

[13] Freud's belief in the "phylogentic fantasy," with its Lamarckian reasoning, remains one of his most refuted formulations (see Freeman, 1967).

is later disposed of by them in a murderous revolt. The sons become guilt-stricken by their actions, and therefore elevate the dead father to the position of a god, with attendant restrictions regarding parricide and incest. Freud felt that this event (whether real or psychical) was later reflected in community life, laws, and religion. As one example, he points to the practice of circumcision as a possible remnant of this fantasy. He states:

> I believe these primal phantasies, as I should like to call them... are a phylogenetic endowment... It seems to me quite possible that all the things that are told to us today in analysis as phantasy-- the seduction of children, the inflaming of sexual excitement by observing parental intercourse, the threat of castration (or rather castration itself)-- were once real occurrences in the primeval times of the human family, and that children in the phantasies are simply filling in the gaps in individual truth with prehistoric truth. (1920/1963, p. 461)

Although concentrating on this "typical" Oedipal pattern, Freud (1931/1950) acknowledges that there are variations on this theme:

> All the child's experiences at the period of the Oedipus complex, but also everything that has ever happened to him before, exercise an influence; the experience of the earlier period will do so mainly in the sense that if it has taken a pathological form it will from the outset give a pathological, i.e. excessively pregenital, coloring to the formation of the Oedipus complex itself. (p. 210)

Freud (1931/1950; 1933/1964) was especially cognizant of the pre-oedipal influences on later development in girls. Furthermore, aside from

heterosexual object choices, Freud (1905/1949) was convinced that homosexual object choices were also prevalent, even in "normal" mental life: "Indeed, libidinal attachments to persons of the same sex play no less a part as factors in normal mental life... than do similar attachments to the opposite sex" (p. 23). Therefore, Freud (1925/1950) believes that side by side with the "positive" Oedipus complex there is the "negative":

> The matter is made more difficult to grasp by the complicating circumstance that even in boys the Oedipus complex had a double orientation, active and passive, in accordance with their bisexual constitution; a boy also wants to take his *mother's* place as the love-object of his *father*.... (italics in original, p. 188)[14]

Freud (1926/1936) believes, however, that both forms of the Oedipus complex (positive and negative) are "broken down" by the castration complex.

Following Freud's initial descriptions, other authors have discussed variations on the Oedipus complex (some revisionist views on the Oedipus complex are summarized in Appendix B). As but two examples, Fenichel (1930/1953, 1931/1953), notes the influence of new siblings, trauma, and the personality of the parents, and Rabin (1958) discusses the importance of the family constellation. Waelder (1960), however, reiterates that despite these variations: "...an Oedipus complex in the generalized sense,

[14] This notion makes research into the Oedipus complex somewhat problematic. If, as Freud believed, most individuals go through a "complete" Oedipus complex (meaning both the positive and negative), then making predictions about derivatives of these is difficult. Unfortunately, Freud did not discuss the negative Oedipus complex in any detail, leaving the researcher to construct his or her own hypotheses regarding it.

i.e., a kind of premature rehearsal of the future sexual role with parents or parental substitutes as objects, and with details varying with the child's environment, is probably universal" (p. 114). Unfortunately, however, the wide-ranging interpretations of the Oedipus complex have made it something of a slippery concept, and as Simon (cited in Sacks, 1985) noted: "Anyone who shoots at the Oedipus complex is shooting at a moving target since what it subsumes, explicitly and implicitly, has steadily changed over the last 70 or 80 years" (p. 203; see also Simon, 1991).

Finally, although Freud (1933/1964) outlined the ways in which the Oedipus complex is dissolved, he was somewhat unclear about its final outcome. On many occasions (e.g., 1924/1949) he posited that the Oedipus complex was "smashed to pieces" by the threat of castration. If it is truly destroyed, however, then there should be little evidence of its dynamic importance later in life. Although Freud (1925/1950) did state that: "In normal, or rather ideal cases, the Oedipus complex exists no longer, even in the unconscious..." (p. 196), in other writings he makes it clear that remnants do exist, even in "normal" people. For example, Freud (1920/1963) states that:

> Since, however, everyone, and not only neurotics, experiences these perverse, incestuous and murderous dreams, we may conclude that people who are normal today have passed along this path of development... and that neurotics merely exhibit to us in a magnified and coarsened form what the analysis of dreams reveals to us in healthy people as well. (p. 420)

Furthermore, Freud (1900/1955) discusses the difference between "normal" and neurotic people as being a matter of degree:

> Now psycho-analytic research finds no fundamental, but only quantitative, distinction between normal and neurotic life; and indeed the analysis of dreams, in which repressed complexes are operative alike in the healthy and the sick, shows a complete identity both in their mechanisms and in their symbolism. (p. 373-374)

Perhaps Freud's strongest statements regarding this matter, however, are the following: "...we can say this of dreams: they have proved that *what is suppressed continues to exist in normal people as well as abnormal, and remains capable of psychical functioning*" (italics in original, 1900/1955, p. 608); and:

> ... it is quite certain that this current is still there as a form and possibility, and can always be cathected and put into activity again by means of regression; the only question is (and it cannot always be answered) what degree of cathexis and operative force it still has at the present moment. (1921/1955, p. 138)

The centrality of the Oedipus and castration complexes

The importance of the Oedipus complex in both personality development and psychopathology can not be underestimated. In 1916/1949, Freud stated that: "In this sense, the Oedipus complex is justifiably regarded as the kernel of the neurosis," although he later recanted this (1931/1950). Freud (1905/1949) continued to maintain, however, that the importance of the Oedipus complex "...has become more

and more clearly evident; its recognition has become the shibboleth that distinguishes the adherents of psycho-analysis from its opponents" (p. 104; footnote added in 1925). Furthermore, Freud (1920/1963) notes that the universal prohibitions against incest underscore the power of this complex:

> ... the fact is entirely overlooked that such an inexorable prohibition of it in law and custom would not be needed if there were any reliable natural barriers against the temptation to incest. The truth is just the opposite. A human being's first choice of an object is regularly an incestuous one.... (p. 416)

Interestingly, he also notes that in mythology, "... incest, which is supposed to be so much detested by humans, is unhesitatingly allowed to the gods" (1920/1963, p. 416). Aside from evidence from the couch, Freud (1928/1950) notes that literature often concerns itself with the themes inherent in the Oedipus complex:

> It can scarcely be owing to chance that three of the masterpieces of the literature of all time-- the *Oedipus Rex* of Sophocles, Shakespeare's *Hamlet* and Dostoevsky's *The Brothers Karamazov*-- should all deal with the same subject, parricide. In all three, moreover, the motive for the deed, sexual rivalry for a woman, is laid bare. (italics in original, p. 235)

In fact, Freud (1913/1953) states that "... I should like to insist that... the beginnings of religion, morals, society and art converge in the Oedipus complex" (p. 156). In agreement with Freud, Boehm (1931) notes that the general theme inherent in the Oedipus complex has been explored in literature for more than 2000 years:

> ...it can hardly be doubted that material which for more than two thousand years writers have been continually trying to master must embody a problem of the very greatest of significance, especially when we learn that the Greek Oedipus had been translated countless times in different countries and periods. (p. 433)

The importance of castration anxiety in psychoanalysis is also great. Freud (1933/1964) notes that "... the fear of castration is one of the commonest and strongest motives for repression and thus for the formation of neurosis" (p. 77). Fenichel (1945) believes that castration anxiety is the most dynamic and important kind of anxiety. In fact, a quick scan of The Psychoanalytic Theory of Neurosis (1945) reveals that castration anxiety has been linked to a host of psychological issues and disorders, including: impotence and other sexual difficulties, anxiety hysteria, phobias (including fear of death, suffocation, infection, and insanity), exhibitionism, promiscuity, schizophrenia, homosexuality (which was at that time considered a perversion), sadism and masochism, compulsions, tics, fetishes, kleptomania, coprophilia, and even learning problems. Finally, the importance of castration anxiety in psychoanalysis remains today, as exemplified in Rangell's (1991) Plenary address to the American Psychoanalytic Association, during which he called castration anxiety the "...most undervalued theme in psychoanalysis in relation to its clinical importance" (p. 3).

Having discussed those aspects of Freud's theories which are

pertinent to this investigation, what follows is a brief introduction to the use of human figure drawings and spontaneous imagery, and a more detailed exploration of Reyher's research program.

Background of figure drawing research

Figure drawings have been utilized by human beings for communication, art, and other reasons for thousands of years. The psychological interest in figure drawings has also existed for a long time; for example, in 1855 Burckhardt analyzed artistic works in order to describe the dominant personality and sociopolitical climate at the time (some say with great accuracy-- Hammer, 1958).

During this century, interest in figure drawings has expanded greatly, and seminal books were published which increased the possible use, as well as the range of interpretation, of figure drawings (Machover, 1949; Hammer, 1958; Koppitz, 1968; McElhaney, 1969; Ogdon, 1979).[15] However, careful scrutiny of the research (Swensen, 1957; 1968; Roback, 1968; see also Murstein [1965], for a collection of early empirical work) was not very supportive of many of the hypotheses put forth by Machover and others. These reviews did not, however, end interest in figure drawings; Lubin, Wallis and Paine (1971) note that the Draw-a-Person test (DAP) is still widely used in clinical settings. Perhaps part of the reason for its popularity is that the DAP, unlike other projective measures,

[15] The widespread use of figure drawings for intellectual assessment (e.g., Goodenough, 1926; Harris, 1963) will not be addressed here, as it is not relevant for the present purposes.

requires the person to create his or her own stimulus, allowing for a more "spontaneous" and personal statement. Other advantages of projective drawings have been addressed by dynamically-oriented researchers, although not coming from a strictly Freudian perspective. For example, clinical lore has suggested that projective drawings are more informative than the Rorschach or TAT because they can circumvent surface defenses easier. As Hammer (1968) pointed out:

> This is because a subject, while drawing, can, in a relative sense, exclude the examiner-- can immerse himself more deeply and become more absorbed, in the unfolding graphic projection, than he ever can in directly relating to the examiner and telling him what he sees in one response after another on Rorschach stimuli. (p. 376)

This point was also stressed by Machover (1953): "Stereotyped defenses are less easy to apply to graphomotor than to verbal projections" (P. 85). Furthermore, Hammer (1958) noted that children can draw before they can write, and suggested that therefore drawings may be capable of reflecting earlier layers of personality. Clinical lore also suggests that projective drawings are, in general, less threatening than the Rorschach (which most people know is a psychological test). Therefore, it is believed that projective drawings allow for "deeper" personality dynamics to be revealed. Hammer (1958) notes that research has supported this assumption:

> Of late, there have been some interesting observations to the effect that there is a difference in the depth of

> personality tapped by verbal and non-verbal projective techniques... With the non-verbal projective drawing it has been found that deeper conflicts frequently press into view.... (p. 603)

Along these lines, Reyher and Smeltzer (1968) found that participants involved in spontaneous imagery (another non-verbal technique) revealed more anxiety, primary process, and direct drive representation than participants involved in verbal associations. Finally, projective drawings have been shown to be amenable to group administration (without any appreciable loss of good data), and rapid retesting:

> In the task of projective drawings, the subject is less prone to be reminded of his previous projections when confronted with the blank page than when confronted with the same Rorschach or TAT stimuli. Or if he does recall his previous performance, he is less likely to repeat it, merely because he is reminded of it. (Hammer, 1958, p.12)[16]

Obviously, clinicians have found figure drawings to be an important part of their battery of projective measures, but research continues to be somewhat unsuccessful in delineating the important aspects of the drawings. Equivocal results are not surprising, however, when one examines the crude methodology and atheoretical nature of most studies which use figure drawings. Furthermore, many of the studies have attempted to examine differences in drawings made by groups with different diagnoses. Ignoring for the moment the dubious reliability of

[16] See Hammer (1958), chapter 24, for a discussion of other advantages of projective drawings over other projective measures.

modern diagnostic systems, Nichols and Strümpfer (1965) noted that: "If there are, indeed, aspects of figure drawings which are related to the personality of the person making the drawing, such a relationship is likely to be obscured in any group comparison by large individual differences..." (p. 670). Furthermore, although the examination of drawings is largely based on psychodynamic principals, Freudian metapsychology has not been regularly used as a theoretical base for understanding these phenomenon. Although the noted philosopher of science Grünbaum (1984; 1993) was sympathetic to Freudian metapsychology, many psychodynamically-oriented psychologists, including psychoanalysts, have eschewed metapsychology while retaining the psychoanalytic clinical theory. This has led researchers to divorce themselves from a potentially fruitful theoretical background (metapsychology) which may help to explain the phenomenon under investigation. This has been especially true in the rather large literature on the DAP (see Acheson, 1972, for a review), in which the hypotheses, methods, manipulations, etc. are often not derivable from the theory which they are supposedly testing. To rectify this situation, Reyher has capitalized on a laboratory method that purportedly accesses Freud's intrapsychic domain of repressed sexuality; namely, graphic behaviors in human figure drawings.

Reyher's research program

Reyher (1959) realized that part of the problem with earlier research using the DAP was that it did not always differentiate between anxiety based on the testing situation and intrapsychic anxiety. He therefore proposed that the DAP be compared with drawings of a more neutral object (he suggested an automobile) so that anxiety based on the testing situation could be differentiated from intrapsychic anxiety generated by the act of drawing the human figure. Later research (Handler & Reyher, 1964) supported the choice of an automobile, as it was shown to be of equal difficulty to draw as the human figure. A further methodological improvement in this line of research was the use of a participant as his or her own control (by having them do a number of different drawings). What follows is a brief examination of the findings of studies undertaken by Reyher and his students.

Handler et al. (1964) found that for male students there were more graphic indicators of anxiety (unfortunately this article doesn't specifically say which indicators were used) on the figure drawings (both of the male and female) compared to the automobile. They also noted that in high "stress"[17] situations, participants would tend to "flee" the situation and finish the task quickly, which resulted in a lack of shading, erasure, reinforcement, and emphasis line. Clinical lore has usually associated these signs with anxiety, but these results suggest that they may also represent

[17] The concept of "stress" has come under fire lately, and many researchers find it to be an outdated concept (e.g, Engel, 1985). In this review this term will be used because it was used in the original studies, although "close monitoring" or "ego threat" would appear to be more accurate.

participant's attempts to make a better drawing.

Handler & Reyher (1966) added to this research by including a measure of electrodermal activity (GSR), taken while participants were doing the figure drawings. Furthermore, in order to examine psychosexual conflict more directly, they split the body into three areas--primary sexual (including the genitals), secondary sexual (shoulders, chest, etc.) and nonsexual. They found that males exhibited higher GSR and graphic anxiety while drawing human figures than the car, and the highest level of anxiety was exhibited while drawing the female. They also found that while drawing the male, males exhibited higher GSR for the secondary sexual areas, while on the female drawing the highest GSRs were on the primary sexual areas. Finally, they found that shading, erasure, reinforcement, and emphasis line correlated significantly and negatively with GSR; these findings are therefore in line with those of Handler et al, 1964, discussed above.[18]

Based on these two studies, the authors reexamined the literature on anxiety indices in figure drawings (Handler & Reyher, 1965), and found that more often than not shading, erasure, reinforcement, and emphasis line were typically found to decrease under high "stress" situations. They reiterate that these behaviors are involved in making the drawing better,

[18] Although not part of this research program, a study by Jacobson and Handler (1967) also found more graphic indicators of "stress" when participants were in a stressful testing situation (hooked up to a complex apparatus) compared to when they were not. However, they found more shading, hair shading, erasure, reinforcement, and emphasis line on the non-stress drawings than the stress drawings. These results are in line with those of Handler et al., 1964; 1966, as noted above. Finally, as with the previous studies by Handler and Reyher, they found that the automobile reflected less intrapsychic stress than the human figure drawings.

and suggest that "... the presence, rather than the absence, of reinforcement, erasure, and shading may at times indicate a coping with anxiety, and might be indicative of good ego strength" (p. 308). Based on this work, Handler (1967) published a manual for scoring these graphic indicators.

Sanders & Reyher (1972) added another stimulus dimension for better accessing the Freudian domain by including nude figure drawings along with the more traditional DAPs. They corroborated earlier findings that for males drawing the human form was more anxiety inducing than the automobile. In contrast to the previous study, however, they found no difference in GSR for the male versus female drawing. They did find more anxiety for nude versus clothed figures, but again no difference was found between nude female and male drawings. The increased anxiety on the nude drawings was due mostly to the primary sexual areas. For the clothed female drawing, higher GSRs were found on the secondary sexual areas, while on the nude drawings higher GSRs were found in the primary sexual areas. This same shift also occurred when participants drew male figures.

Acheson (1972) added another mode of representation to that of graphic behavior. She had her participants (all males) engage in a period of spontaneous imagery following their figure drawings. The visual imagery was scored for drive content using Holt's (1970) scoring scheme. She also scored indicators of resistance and psychopathology in the

imagery, as well as measuring GSR and rating the drawings for indications of psychosexual conflict. She hoped to find differences in the anxiety measures and GSR based on level of psychosexual maturity. Overall, the results were somewhat disappointing; one possible reason for this was that an attractive female experimenter was used, and Acheson suggests that the "stress" of this situation might have therefore washed out any other possible findings. This possibility was strengthened by the presence of many drawings which would normally indicate severely neurotic or even schizophrenic reactions. Since the participants were college students, she felt it more likely that these drawings indicated the high level of "stress" associated with the attractive experimenter. There was, however, one interesting post hoc result; a psychopathology score gleaned from the visual imagery correlated highly with ratings of psychosexual conflict in the figure drawings. This finding is certainly ripe for corroboration, because if it is found to be robust, it will demonstrate that figure drawings can indeed be reliably examined for indicators of psychopathology.

Myers (1965) added yet another mode of representation to graphic behaviors and visual imagery by having her (female) participants draw both human and animal figures, and make up stories for each of their drawings. These stories were scored for drive content according to Pine (1960). In disagreement with hypotheses, no differences in drive content were found between the stories told about animal and human drawings. However, one possibility for this finding was that participants wrote their

stories (instead of verbalizing them). This could have allowed for a greater use of secondary process thinking (Freud, 1900/1955), thereby diminishing the level of drive content. In terms of GSR activation, her results corroborated those of Handler et al., (1965), except that no difference was found on GSR between the female and the automobile drawing. In other words, for female participants, drawing a female is not as anxiety provoking as is drawing a male. Finally this study demonstrated that the use of the automobile as a control object works equally well for female participants as it had for male participants.

Based on the results of previous studies, Roach (1981) examined the specific nature of the effect of an experimenter on figure drawings. In Freud's intrapsychic domain, mother and father have different effects on the client/participant's psyche, and leave different imagos, or representations, of each. His clinical theory suggests that one or more of these is stimulated by the psychoanalyst; the same might be true for the male and female experimenters. Therefore, Roach used both male and female participants, and found that there was more "flight" (less erasure, detail, etc.) when the experimenter (and a polygraph machine) was present than when absent. Also, participants spent less time when an experimenter was present, and the drawings demonstrated this by their lack of detail. This finding led Roach to suggest that in future research participants should be asked to draw a "complete figure," as Koppitz (1968) has suggested. This study also replicated earlier research by demonstrating

that a greater number of graphic anxiety indicators differentiated between the high and low anxiety conditions on the human figures than on the automobile drawing. In terms of gender, it was found that an opposite sex experimenter led to more anxiety. Finally, an attempt was made to group the graphic anxiety indicators into those reflecting intrapsychic stress and those reflecting external stress. Unfortunately, this was unsuccessful, perhaps due to the fact that many of these indicators are reflective of both intrapsychic and external stress. This study is important, however, in that it suggests that one may want to get drawings in an unstressful situation in order to ensure that the participants spend an adequate amount of time on their drawings.

Roach expanded on this study in 1984. He again set out to examine the effect of an experimenter, and hypothesized that with an experimenter present (a supposedly "high-stress" situation), the differences between the human figures and the automobile would be washed out. Unlike expectations, however, he found that significant differences in graphic anxiety were found between the human figures and the automobile regardless of whether the experimenter was present or absent. It was suggested, however, that even when the experimenter was present high "stress" was not necessarily aroused, thereby not being a true test of the hypothesis. One possible reason for this was that there was no polygraph present, unlike in the previous study. Based on the results of the previous study, a further attempt was made to classify the graphic indicators, but

this was again unsuccessful. Furthermore, he found that instructing participants to draw complete figures did reduce the likelihood of impoverished drawings. Finally, the results of these two studies allowed him to examine Handler's (1967) figure drawing anxiety indices, and make suggestions as to possible future revisions in this scale.

Like Myers (1965), Hamernik (1985) asked her participants (both male and female) to tell stories and relate wishes for each of their drawings (including an animal). Unlike the Myers study, she also manipulated the type of representational vehicle; the stories were told both orally and in writing. GSR and graphic indicators were used to measure anxiety. She found a strong and consistent gender difference on the GSR, suggesting that males had higher reactivity than females on all of the drawings, as well as the orally related stories. This would appear to demonstrate that completion of projective drawings arouses more anxiety in males than females. All participants were more anxious making up stories to the female drawing, and especially when the story was related in oral rather than written form. No interesting results were found on the animal drawings.

Hamernik (1987) then included another aspect of the experimenter effect, that of "personal power" (including their attire, speech, SES, etc.). She used female participants, and had them either closely monitored or less closely monitored, and found significant differences on many of the graphic indices between these two groups. Overall, close monitoring

resulted in an abbreviation of drawing time. She concluded that close monitoring may result in deteriorated performance. She also found significant differences based on the personal power of the experimenter, suggesting that in future research if more than one experimenter is used, these differences will have to be taken into account when analyzing the drawings for intrapsychic anxiety indicators. She also corroborated earlier findings that the automobile is a good control object for females. Unlike previous research, however, she found that the females rated the female as the most difficult drawing, and spent the most time on it.

Tobias (1993) added to this line of research by manipulating the level of "ego-threat" (a more theory laden term than "stress"). He achieved this by having participants (both male and female) do figure drawings at home, in a group, and attached to a polygraph machine in the laboratory. Furthermore, like previous studies he manipulated the "personal power" of the experimenter by having them act either "formally" or "informally." This study corroborated many earlier results demonstrating higher graphic indicators of anxiety in the high ego-threat condition. This study also found that males were more libidinally reactive than females, and uncovered cogent evidence for displacement of libido on the drawings. He also found, for both males and females and in both low and high-threat conditions, a negative correlation between a graphic measure of anxiety (SGI)[19] and a graphic measure of libido (EGB) on the

[19] SGI and EGB will be discussed below.

auto and male drawings, but negligent correlations between these measures on the female drawing. Finally, he discussed evidence which supported the contention that EGBs do actually index libido.

In attempting to reach any general conclusions based on this line of research, although some of the findings have proven robust, many contradictory results emerge (see Handler, 1985). This led Reyher (1993a) to attempt to evaluate this research program using the philosophy of science espoused by Lakatos (1978), which would hopefully help to shed some light on both the discrepancies and the more robust findings.[20] In a nutshell[21], the Lakatosian perspective evaluates lines of research by comparing them with other rival theories. Those theories which have greater empirical content, are able to corroborate novel predictions and engender a greater rate of discovery, and are able to "digest" anomalies without excessive ad hoc explanations, are deemed "progressive" compared to those which do not, which are deemed "degenerative."

According to Lakatos (1978), the theoretical hard core commitments of a theory are protected from refutation by a belt of "auxiliary hypotheses," as well as by the experimental method and dependent variables. Numerous authors (Meehl, 1978; Dar, 1987) have noted that in psychological research, unlike in other scientific fields, there is not usually a derivable connection between the measures and methods used, and the

[20] A brief examination of psychoanalysis and its relationship to the philosophy of science can be found in Bellak, 1993.

[21] Brief descriptions of Lakatos' views can be found in Gholson & Barker (1985) and Dar (1987).

core theory supposedly being tested. In fact, in many psychological experiments it is difficult to decipher what in fact the core theory is.

By using a Lakatosian perspective, Reyher (1993a) was able to examine a number of anomalies in previous research using the DAP and delineate the hard core assumptions which underlie this line of research. Through this he was able to ground the results of these experiments in a firm theoretical base (Freud's metatheoretical writings), a clear improvement over other studies using the DAP which have often been atheoretical.

The primary hard core assumption was first delineated by Machover (1949): "... the human figure drawn by an individual who is directed to 'draw a person' relates intimately to the impulses, anxieties, conflicts, and compensations characteristic of that individual" (p. 35). This hard core was later refined by Levy (1958) and Hammer (1958, 1968), who stated that:

> The field of projective drawing interpretation also rests upon several theoretical postulates: (a) There is a tendency in man to view the world in an anthropomorphic manner; that is, in his own image. (b) The core of the anthropomorphic view of the environment is the mechanism of projection. (1958, p. 53)

Reyher (1993b) was more explicit in delineating the assumptions (or auxiliary hypotheses) necessary to make Freud's metapsychology relevant to drawing the human figure. Those assumptions relevant to the present

investigation include: 1) the pencil is an extension of the finger, 2) graphically creating a body part is tantamount to touching it, 3) touching a body part arouses sexual instincts (wishes)[22] and, 4) their preferred infantile aims, 5) this satisfaction is subject to prohibition and is thereby 6) anxiety-producing.

Based on these core assumptions, figure drawings should be examined for asymmetries and other indicators of anxiety, all of which need to be interpreted through the theory. Using Freud's theoretical landscape, lower level "empirical" constructs, such as gratification, anxiety, flight, etc. must be related to specific graphic features of the drawings (erasure, shading, etc.). Next, these are then articulated using higher level theoretical constructs including instinct/wish, primary process, displacement, etc., all of which are then integrated into yet higher level constructs (compromise formation-- symptoms, derivatives, etc.), and finally, a metatheoretical construct such as "ego" (Reyher, 1993b). The resulting theory provides a scaffolding in which to predict and interpret results from empirical investigations. In summary, Reyher (1993b) states:

> Thus, placing the pencil/finger on the paper for the purpose of creating an image of the human body stimulates incestuous and pregenital wishes (partial instincts) in the artist that take a parent as the first and preferred object of satisfaction. Both wishes and instinct-restraining processes are simultaneously intensified. Instinct-restraining facets prompt the creation of a substitute (a derivative)-- not usually

[22] Freud (1926/1936) stated that: "... touching and physical contact are the immediate aim of the aggressive as well as the loving object-cathexis. Eros desires contact because it strives to make the ego and the loved object one, to abolish all barriers of distance between them" (p. 79).

> available in the untrained artist-- that allows discrete (disguised) depiction of the sexual anatomy. (p. 3)

Using a Lakatosian perspective, Reyher (1993a, 1993b) reviewed this line of research and developed new hypotheses, most notably concerning graphic indicators of anxiety. Recall that research by Handler and Reyher, discussed above, found that shading, erasure, reinforcement, and emphasis line behaved similarly (and opposite to expectations and to the behavior of other graphic indices of anxiety). Reyher (1993a, 1993b) notes that this "data-driven" grouping also makes sense theoretically. First he notes that shading, erasure, reinforcement, and emphasis line are all used to make the drawing look better, in contrast with other indices (omission, transparencies, etc., which make the drawing look worse). Therefore, as mentioned above they indicate the ego's attempt to do a good job, and hence Reyher renamed them the Egoistic Graphic Behaviors (EGB). He also notes that these four indices are libidinal, because they all involve "rubbing" or "stroking" the body part. Furthermore, they involve motor behavior, which Freud (1900/1955; 1916/1949) believed was also libidinal. Therefore, according to Reyher the EGBs measure ego-interests and libidinal wish-fulfillment.[23] The other indices noted in Handler's (1967) scoring system have been reliably associated with anxiety, and were

[23] This follows closely Freud's splitting of the instincts into "ego-instincts" and "sexual instincts." Freud (1933/1964) stated: "We included in the former everything that had to do with the preservation, assertion and magnification of the individual. To the latter we had to attribute the copiousness called for by infantile and perverse sexual life" (p. 85). Furthermore, Freud (1905/1949) believed that initially sexual activity is intimately related to "...functions serving the purpose of self-preservation" (p. 60), suggesting an intimate connection between the sexual and self-preservative (ego) instincts.

therefore labeled by Reyher the Standard Graphic Indices (SGI).[24]

The reason that drawing is such as good method of assessing this domain is that it is a plastic medium which (like dreams-- Freud, 1900/1955) is therefore capable of expressing unconscious fantasies, unlike logical verbal communication (this is one reason why research into psychoanalytic principles using self-report measures is inherently flawed). As the participant draws the figure (or responds to the Rorschach, etc.) primary process comes into the fore. In this way the figures are like dream images, in that the participant is not usually conscious of the true meaning of the images. Because drawing is a plastic medium, it is capable of expressing the unconscious wish through wish-fulfilling derivatives. In a sense, the paper image created when doing a figure drawing is the public representation of an internal mental image, and is therefore subject to the same vicissitudes as found in dreams and other forms of imagery (such as displacement, condensation, etc.; Reyher, 1993b).

Another metapsychological idea which is necessary to understand figure drawings is the fact that if the instinct-restraining factors deny conscious mediation, a wish will seek gratification through either a motor pathway or other substitute formation (Freud, 1900/1955). Because of this, drawing, a motor activity, is again (theoretically) an excellent method. As Hammer (1968) pointed out: "In projective drawings, the subjects's psychomotor activities are caught on paper" (p. 366). This point

[24] The scoring manual for each of these graphic behaviors can be found in Appendix E.

was also stressed by Machover (1949), who believed that drawings may give both direct and compensated expression to the drives, defense mechanisms, and conflicts characteristic of the person. The graphic behavior involved in drawing can depict both the wish and the defense; the dimensions of this graphic behavior are characterized by approach (pressure against paper), repetitive movement (rhythmic), avoidance (decrease in pressure, lifting pencil off paper), and inhibition (paralysis, displacement) (Reyher, 1993b).

For the present study, a further auxiliary hypothesis is necessary. According to Freud (1900/1955), the psychic apparatus allows unconscious wishes to seek out derivatives in the Pcs. as long as they escape detection by the censorship, which allows for disguised gratification in the system Cs. Therefore, unconscious fantasies stimulated by the drawing of a human figure can persist in the Pcs. after the completion of the drawing and seek substitute gratification in other outlets. In other words, if the wish is too blatant the censorship will inhibit the wish, causing it to become "dammed up" until it can find a suitable outlet (e.g., one that will not lead to "unpleasure"). In the present study this delay of gratification while the ego searches for suitable outlets is called "temporal displacement," a notion Freud never discussed specifically, but one which can be inferred from his writings on the "damning up" of libido (1920/1963): "The ego discovers that it is inevitable for it to renounce immediate satisfaction, to postpone

the obtaining of pleasure, to put up with a little unpleasure..." (p. 444; see also Freud, 1900/1955).

A Brief Introduction to "Spontaneous Imagery"

Reyher and associates have begun to generate a significant research program using spontaneous imagery (also called "free-imagery" or "non-directed imagery") as a means of accessing the unconscious. As there has not been a systematic examination and reevaluation of this literature to date, these studies will not be discussed here in detail (the reader is referred to discussions of early work in Reyher, 1977, 1978; and studies by Reyher et al., 1968; Acheson, 1972; Larison, 1974; Stern, 1974; Morishige & Reyher, 1975; LeBaron, 1976; Moses & Reyher, 1984; Gaines, 1994). However, a brief overview of Reyher's theoretical discussions of spontaneous imagery is warranted; more systematic discussions of spontaneous imagery, and its place in Emergent Uncovering Psychotherapy, can be found in Reyher (1977, 1978).

On Reyher's reading of Freud, imagery is, like dreams, under the sway of primary process. Furthermore, when participants/clients are asked to describe visual images, there is a shift from a conceptual to a descriptive use of language, which allows for repressed strivings to come to the fore in the form of derivatives. Reyher (1977, 1978) notes that typically imagery begins with a veridical recollection of prosaic everyday experiences. However, at some point the images will become anxiety

provoking, even when the images appear "innocent" or innocuous. According to Reyher, these images inevitably turn out to be anxiety-laden derivatives of repressed impulses. If the imagery is allowed to continue, repressed impulses become more and more blatantly depicted, suggesting that the imagery has become a vehicle for representing the repressed impulses. Successful "uncovering" is achieved when the client is finally able to experience the drive-related affects and impulses, and their repugnant aims; i.e., when the repressed wish is fully conscious.

As noted above, while the participant/client will typically be unaware of the "meaning" of the images, Reyher (1977) notes that displacement and psychic determinism are often revealed via retrospective examination of imagery protocols (i.e., the backwards tracing of imagery from blatant depiction to the initial imagery):

> When uncovering eventuates in the direct depiction of repressed strivings, the preceding iconic images are generally linked to the depicted striving by resemblance. Thus, by retrospective observation and identification, the images are shown to be derivatives in a much more convincing fashion than are the conceptual-verbal associates of free association. (p. 262)

He further notes that both clinical and laboratory evidence reveals that the nature of the uncovered material reflects childhood sexual strivings.

In summary, Reyher (1977) states:

> The advantage of free imagery over free association ultimately is based on the fact that images are not symbols. They are not representational. Since they are related to strivings on gradients of similarity, they

> indirectly present strivings in awareness rather than represent them cognitively as do words. It is because of the palpable resemblance of the images to the strivings they depict that the strivings are intensified.... (p. 272)

As is evident, both imagery and figure drawings should prove to be excellent means for tapping into unconscious phenomena because they are plastic media and therefore capable of depicting repressed wishes in symbolic and indirect means. Furthermore, the derivatives in each modality should, according to Freud, be related to the underlying wish due to their analogical similarity and resemblance to the unconscious wish. Therefore, the researcher should be able to uncover some aspects of the repressed wish without having to rely on "asking" the client/participant, which, due to repression, security operations (Sullivan, 1953), etc., is unlikely to reveal the true nature of the wish.

The present study

One point that is apparent from the review in Appendix A is that many studies which purport to examine the Oedipus complex and castration anxiety do so without any manipulation of sexual arousal. This is unfortunate, because castration anxiety, as delineated by Freud, is a specific outcome of sexual arousal in the mental apparatus. Therefore, any study which attempts to be a true test of this theory will need to manipulate the intensification of libido in some manner. Furthermore, some of the studies do not adequately address the notion of defenses such as

displacement, condensation, etc. As Friedman (1952) noted:

> ...any research approach to psychoanalytic propositions must fulfill two basic requirements. It must allow the investigator to by-pass the surface defenses and infer unconscious content, and it must yield data which are still recognizable as derivatives of the psychoanalytic phenomena which are being studied. (p. 66)

In the present study projective drawings and spontaneous imagery were used, because they fulfill both of these requirements. As discussed previously, human figure drawings can be used to both stimulate libidinal drives (due to the drawer touching the object), and examine the vicissitudes of this libidinal intensity and defense. Furthermore, the use of figure drawings and imagery, both being plastic media, allows for an examination of derivative formation and disguised wish-fulfillment, and is directly derivable from Freudian theory.

Overview of experimental design

This study attempted to examine Oedipal dynamics in human figure drawings and spontaneous imagery, as well as gender differences in these dynamics. College students were asked to draw four objects (mother,[25] father, person of the opposite gender, and an automobile) which differ in their remoteness to the primary Oedipal object, and, theoretically, their conflict-inducing properties. Upon completing each drawing, participants

[25] To my knowledge, this is the first study to include drawings of mother and father. The only other study I could find which specifically asked for drawings of the mother was by Amann-Gainotti & Sellaroli (1991). However, this study asked for a drawing of "a mother with a baby inside her tummy"-- they were examining sexual differentiation in children's drawings of pregnancy.

engaged in a period of "free" drawing, during which they were instructed to draw "whatever comes to mind" on the same page as the figure drawing. The second object was used as a secondary measure of the dynamic outcome of the libido (and defense) which was aroused during the figure drawings, as well as a possible repository for "temporal" displacement. Basically, this procedure is similar to asking an analysand to "free-associate" to something, except these participants were asked to free associate graphically instead of verbally.[26] Even if these free drawings appeared unrelated to the figure drawings, Freud (1900/1955) notes that: "...superficial associations are only substitutes by displacement for suppressed deeper ones" (p. 531). Furthermore, the free-drawings should be excellent media for these displacements, due to Freud's (1900/1955) notion that: "The direction taken by the displacement usually results in a colourless and abstract expression... being exchanged for a pictorial and concrete one" (p. 339). Finally, a week later participants returned and were asked to "touch-up" their drawings (which theoretically should stimulate the unconscious fantasy), and then visualize them and engage in a 5-10 minute period of spontaneous imagery following each drawing.

I hypothesized that the four stimulus objects (auto, opposite gender, parents) would generate different degrees of censorship and conflict due to their remoteness or closeness to the Oedipal object. Based on the

[26] This is not a new idea. Stern (1952), for example, describes the use of "free-painting" in psychoanalysis: "When the analysis is underway, the patient is informed that the treatment may be intensified by his painting pictures at home...The patient is instructed to take a brush and to put onto paper whatever comes into his mind..." (p. 66).

aforementioned core assumptions of figure drawings, it was assumed that drawing the human figure is tantamount to touching it. Furthermore, this "paper image" is subject to the same vicissitudes as are other images, such as dreams. I expected that for males, drawing the mother would especially cue a flight of libido due to the threat of castration. Furthermore I expected that if, due to censorship, the libido is thwarted from its original aim, it would be displaced onto a non-sexual body part or onto the following drawing, resulting in sexual derivatives. Because there is no a priori way of determining the fate of the libido, one or the other of these patterns of results was expected. Furthermore, for males, drawing the mother was expected to generate castration anxiety, which will be depicted on either the figure drawings or the subsequent drawing. The automobile, because it does not involve touching a human body, should be the least conflict-inducing. Therefore, for males measures of anxiety and conflict were expected to align themselves according to what will be referred to as the "expected order of conflict": i.e., they will be lowest on the automobile, next on the father, next on the opposite gender, and highest on the mother stimulus object.[27] A similar pattern of results was expected with the imagery data.

For females, who are less libidinally reactive to castration anxiety, I

[27] It should be noted that this proposed order of conflict-inducing properties of the stimulus objects is based on the "positive" Oedipus complex. As discussed above, Freud did not go into great detail about the "negative" Oedipus complex, making it difficult to research. He did seem to believe, however, that the "positive" (simple) was the more prominent and important constellation for most people, and therefore this study proceeds from that viewpoint. In this regard, Freud (1923/1961) stated: "For one gets the impression that the simple Oedipus complex... represents a simplification or schematization which, to be sure, is often enough justified for practical purposes" (p. 33).

expected less variability in measures of anxiety and libido across the different stimulus objects than males. I expected, however, that they would exhibit conflict, anxiety, and displacement according the female "expected order of conflict": i.e., lowest on the auto, next on the mother, next on the opposite gender drawing, and highest on the father stimulus object. A number of other gender differences were also predicted.

Further auxiliary hypotheses

In order to measure these dynamics, a number of scales were used with the assumption that they accurately and reliably assess what they were designed to assess. Although they will be discussed in detail in the methods section, they will be described here briefly so that the relevant auxiliary hypotheses, and their derivation from topographic theory, can be addressed.

The figure drawings were scored for graphic indicators of anxiety (SGI) and libido (EGB). The reasoning and core assumptions behind these scales have been discussed above. The drawings were also scored for evidence of phallic displacement on the figure drawings (using the PHALLIC scale) and castration derivatives (using the CASTRATION scale). These scales assess the presence of both libidinal and castration derivatives, and attempt to capture what Freud (1926/1936) was describing when he discussed how, due to censorship, "... the castration anxiety was directed to a different object and expressed in a distorted form..." (p. 85).

These scales also involve the auxiliary hypotheses noted in relation to SGI and EGB. Finally, the automobile drawing, another possible repository for displaced libido (see Tobias, 1993), was also scored for its "phallic" characteristics (using the AUTO scale). The main auxiliary hypothesis involved in this scale is that participants will use the automobile drawing as a conduit for expressing phallic/aggressive wishes.

The free-drawings were also scored for EGB's (the EGBFREE scale). In order to assess derivative formation, the free-drawings were then scored for their analogical representation of the male and female genitalia. This scale has two subscores, one for similarity to the male genitalia (ARSm), and one for the female genitalia (ARSf), as well as an overall REMOTE score, which assesses the remoteness of the derivative. Finally, the free-drawings were scored for the "function" of the object using the Object Function Scale, which gives the object a score for each of the following subscales: castrating (OFSc), encapsulating (OFSe), and penetrating (OFSp).

All of these scales are directly derivable from Freud's notions concerning displacement and derivative formation, and are especially relevant to Freud's notions regarding the dream work (Freud, 1900/1955). Specifically, all of the derivative measures attempt to codify analogical and symbolic representations of the genitalia, as a means of indexing a repressed wish.

The imagery was scored for libidinal drive representation according

to the LIBIDO subscore of Holt's (1970; 1977) scale for measuring primary process. This scale is directly derivable from Freud's ideas concerning partial instincts and their development and maturation into so-called genital libido. As with the figure drawings, derivatives were also scored for their remoteness and blatancy of depiction using the Holt scale (the REMOTE IMAGERY and COVERT scales). A revised edition of the castration scale of Schwartz (1991) was used to score the imagery for castration derivatives (the CASTRATION IMAGERY scale). The imagery was also scored for phallic representations using the scale of Greenberg and Fisher (1980-- the PHALLIC IMAGERY scale). Both of these scales attempt to quantify the "amount" of the construct in question by examining verbal material for derivatives of each; therefore they are derivable from Freud's discussion of displacement. The imagery was also scored for evidence of resistance and defense, using the RESISTANCE scale made up of markers used in previous research (Acheson, 1972; Burns & Reyher, 1976; Moses et al., 1985); this scale is derivable from Freud's discussions of repression and defenses. The imagery was scored for self-depreciating comments according to the Holt scale (SELFDEP), in an effort to quantify feelings of worthlessness. Finally, verbal production was scored by simply counting the number of words used by the participant in each imagery session (the WORDS) scale. On Freud's (1908b/1949; 1911/1949) view, words, and thoughts in general, are compromise formations (derivatives),

and therefore allow for partial gratification of disguised wishes.[28]

Specific Hypotheses and Relevant Freudian Theory

Each of the following hypotheses was grouped based on a set of related core commitments; hence they were listed together under the heading "Core commitments." Following a discussion of the relevant Freudian theory, the specific hypotheses, and the predictions which follow, were listed.

In a number of the following hypotheses similar predictions are made for males and females. In analyzing the data, however, they were treated separately. This is because, on Freud's view, gender differences should be ubiquitous; therefore, discorroboration of a hypothesis for one gender does not necessarily lead to discorroboration for the other.

Core commitments I (Anxiety and remoteness)

According to Freud (1900/1955), the psychic apparatus can allow unconscious wishes to seek out derivatives, as long as they are not too blatant. When wishes become too undisguised or blatant, the ego anticipates the onset of a "traumatic state" due to punishment. This "traumatic state" occurs when the ego is overwhelmed by excitation, and is subjectively experienced as anxiety. Furthermore, if libido is thwarted

[28] Freud (1911/1949) states: "Thought was endowed with qualities which made it possible for the mental apparatus to support increased tension during a delay in the process of discharge [of libido]. It is essentially an experimental way of acting, accompanied by displacement of smaller quantities of cathexis together with less expenditure (discharge) of them" (p. 16).

from its original aim due to prohibition and subsequent repression, the affect associated with the wish is transformed into anxiety (Freud, 1915b). If, however, the derivatives are sufficiently remote, the libido can escape the censorship and allow for partial gratification. Freud (1908b/1949) notes in a discussion of dreams that "... such repressed wishes and their derivatives can therefore achieve expression only when almost completely disguised" (p. 179). In a more theoretical context, Freud (1915b/1949) states that:

> If these derivatives are sufficiently far removed from the repressed instinct-presentation, whether owing to the process of distortion or by reason for the number of intermediate associations, they have free access to consciousness. It is as though the resistance of consciousness against them was in inverse proportion to their remoteness from what was originally repressed. (p. 88)

Finally, Freud (1926/1936) believed that castration anxiety is one of the primary sources of anxiety, especially for males. For females, however, the threat of castration is not as relevant a source of anxiety as is the loss of love (Freud, 1933/1964). Despite this, however, Freud continued to assert the importance of female castration anxiety, stating that "... we ascribe a castration complex to women as well" (1933/1964, p.

110).[29]

Based on these core commitments, the following hypotheses were made:

1) As Oedipal (incestual) wishes intensify wish derivatives are generated. This leads the ego to anticipate punishment, which is experienced as anxiety. Furthermore, this leads to repression, and the transformation of affect into anxiety.

2) Wish derivatives that are sufficiently remote will escape detection by the censorship and therefore generate no anxiety or resistance.

3) Wish derivatives that are sufficiently remote will escape detection by the censorship and therefore allow for partial libidinal gratification.

4) Castration anxiety, being one of the primary sources of anxiety, will be highly correlated with all other manifestations of intrapsychic anxiety.

Hypothesis 1 was tested with the following prediction:

> For both males and females, the four stimulus objects will generate anxiety inversely proportional to the remoteness of the Oedipal object. In other words,

[29] The whole notion of female castration anxiety is problematic, as Freud offered somewhat contradictory views on its dynamic significance. In certain writings (e.g., 1926/1936), Freud stated that there could be no castration anxiety in women because the supposed castration had already taken place, and there was no organ that could be lost. However, in his discussions of female homosexuality, and in his case studies and dream analyses, he occasionally discussed "castration" derivatives in female patients, thereby demonstrating the continuing presence of castration anxiety. As he stated in 1926: "We now see that there is no danger of our regarding castration anxiety as the sole motive force of the defensive processes which lead to neurosis... Little girls, in the course of their development are led into making a tender object-cathexis by their castration complex" (p. 143). As discussed in Appendix C, Freud's contemporaries (e.g., Abraham, Rado) expanded on Freud's views and discussed numerous examples of symptoms based on castration anxiety in women, such as fear of dental procedures and hair cuts. In Fenichel's (1945) comprehensive text on psychoanalysis, he summarizes that "...the analysis of some women still reveals an unconscious fear that an organ will be cut off as a punishment for sexual practices" (1945, p. 99). Based on these views, this study will proceed from the standpoint that castration anxiety, although of lesser dynamic significance than in males, can still be a source of anxiety in females.

anxiety is expected to be highest on the Oedipal object (opposite-gender parent drawing), next on the opposite gender drawing, next on the same-gender parent drawing, and lowest on the automobile (i.e., will align itself with the "expected order of conflict").

Hypothesis 2 was tested with the following prediction:

Derivatives which are more remote will generate less resistance. Furthermore, the magnitude of these correlations are expected to align themselves with the "expected order of conflict." This is expected for both males and females.

Hypothesis 3 was tested with the following prediction:

Derivatives which are sufficiently remote will exhibit greater evidence for some libidinal interest. Furthermore, the magnitude of this positive correlation is expected to align itself with the "expected order of conflict." This is expected for both males and females.

Hypothesis 4 was tested with the following predictions:

a) For males, evidence for castration anxiety will be positively correlated with other manifestations of intrapsychic anxiety. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."
b) For females, evidence for castration anxiety will be positively correlated with other manifestations of intrapsychic anxiety.

Core commitments II (Displacement)

According to Freud (1915b/1949), when an unconscious wish seeking gratification is too blatant and therefore detected by the

intersystemic censorship, libido is withdrawn (decathected) from this wish, thereby becoming "mobile." This is the process of repression, and is especially evident when a wish "...come[s] into conflict with the subject's cultural and ethical ideas" (Freud, 1914/1949, p. 50). Following this decathexis, the freed libido can become "dammed up" or can be displaced onto a substitute or derivative (Freud, 1915b/1949). Freud (1900/1955) notes that displacement is used "...to escape the censorship imposed by resistance" (p. 308).

Based on these core commitments, the following hypothesis was made:

5) At some level of libidinal intensity the ego institutes repression. Accordingly, the libido that is decathected (detached) from the wish is transformed into anxiety (hypothesis #1), and becomes mobile and displaceable. Therefore, there will be evidence of libidinal displacement onto either non-sexual body parts, or onto subsequent drawings, when Oedipal wishes are intensified.

This hypothesis was tested with the following predictions:

a) For males, evidence for derivative formation will be highest following the mother drawing, next on the opposite gender drawing, next on the father drawing, and lowest on the automobile (i.e., aligned with the "expected order of conflict").
b) For males, evidence for displaced libido will be aligned with the "expected order of conflict."
c) For males, anxiety will be negatively correlated with libido. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

> d) For males, anxiety on the figure drawings will be positively correlated with evidence for derivative formation on the free-drawing. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."
> e) For males, libido on the figure drawings will be negatively correlated with measures of derivatives on the free-drawing. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

For females, who are not reactive to the threat of castration, and are instead more reactive to the external threat of loss of love (Freud, 1933/1964), there should be less evidence of differential levels of displacement based on stimulus object drawn (see hypothesis #4, below). However, drawing the Oedipal object (father) is still expected to increase libido and anxiety (due to prohibitions against incest; Freud, 1920/1963), and therefore lead to displacement. Unfortunately, Freud was somewhat contradictory in his views on female libido. On many occasions (e.g., 1905/1949; 1935/1971) he described libido as inherently "masculine", meaning that it was "active" in seeking gratification.[30] However, on other occasions (e.g., 1933/1964) he described the "passive" nature of female sexuality. Based on this contradiction, a "rival" hypothesis (see Platt, 1964) can be set up concerning the nature of female libido. If, as Freud

[30] Freud was cognizant of the potential misunderstandings due to the use of the terms "masculine" and "feminine" in this regard: "It is essential to understand clearly that the concepts of 'masculine' and 'feminine', whose meaning seems to unambiguous to ordinary people, are amongst the most confused that occur in science. It is possible to distinguish at least three uses. 'Masculine' and 'feminine' are used sometimes in the sense of activity and passivity, sometimes in a biological, and sometimes, again, in a sociological sense. The first of these three meanings is the essential one and the most serviceable in psycho-analysis" (1905/1949, p. 97).

first believed, all libido is "masculine," then one might expect an increase in phallic or "penetrating" derivatives following Oedipal arousal for females. If, however, female libido is inherently "feminine", then one might expect more vaginal or "encapsulating" types of derivatives.[31] Therefore, hypothesis 6 was as follows:

6) For females, drawing the father is expected to bring about censorship (Hypothesis #1), leading to a withdrawal of cathexis which will then be displaced onto either non-sexual areas of the figure drawing or onto the subsequent drawing. This hypothesis was tested with the following predictions:

> a) rival #1-- For females, evidence for phallic displacement will be highest following the father drawing, next on the opposite gender drawing, next on the mother drawing, and lowest on the automobile (i.e., should align itself with the "expected order of conflict").
>
> rival #2-- For females, evidence for vaginal derivatives will be highest following the father drawing, next on the opposite gender drawing, next on the mother drawing, and lowest on the automobile (i.e., should align itself with the "expected order of conflict").
>
> b) For females, evidence for displaced libido will be aligned with the "expected order of conflict."
>
> c) For females, anxiety will be negatively correlated with libido. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

[31] It should be noted, however, that empirical work by Cameron (1967) found that children (both male and female) in Freud's "phallic" and "genital" stages of development demonstrated a preference for shapes representative of the opposite gender's genitalia, while latency age children preferred shapes representative of their own genitals. This might suggest that subjects who are fixated or regressed to an earlier developmental stage would demonstrate different results in regard to ARSf and OFSe than expected. As there is no way to determine this in the present study, the following hypothesis is somewhat problematic, and should be considered tentative.

d) For females, anxiety on the figure drawings will be positively correlated with libido displaced onto the free-drawing. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."
e) For females, libido on the figure drawings will be negatively correlated with measures of derivatives on the free-drawings. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

Core commitments III (Castration anxiety)

According to Freud (1913/1955, 1924/1949), for males the punishment for incestual wishes is castration. Therefore, any stimulus which arouses forbidden Oedipal wishes will lead to increased castration anxiety. One way the ego can deal with this anxiety is by displacing the libidinous wish onto another object, which, depending on its remoteness, can still exhibit anxiety as well. For females, however, the threat of castration is not as relevant as is the loss of love (Freud, 1933/1964). However, Freud (1933/1964) believed that the woman's "discovery" of her lack of a penis brings about her "castration complex," one symptom of which is a feeling of worthlessness.

Based on these core commitments, the following hypotheses were made:

7) For males, Oedipal (incestual) wishes lead to a fear of punishment (castration anxiety).

8) Females will exhibit less castration anxiety than males.

9) Due to the castration complex, females will exhibit more feelings of worthlessness than males.

Hypothesis 7 was tested with the following prediction:

> For males, evidence for castration anxiety will align itself with the "expected order of conflict."

Hypothesis 8 was tested with the following predictions:

> a) While drawing the mother, males will have greater castration anxiety than females.
> b) Females will have less overall castration anxiety than males.

Hypothesis 9 was tested with the following prediction:

> Females will exhibit more feelings of worthlessness than males.

Core commitments IV (Further gender differences)

Although Freud was never clear on this, there is some evidence that he believed that males would be more libidinally reactive than females. For example, in 1905/1949 he stated: "Activity and its concomitant phenomena (more powerful muscular development, aggressiveness, greater intensity of libido) are as a rule linked with biological masculinity..." (p. 97). Furthermore, he believed that during puberty females suffer from greater repression of sexuality, and have to abandon clitoral primacy (with its concomitant active sexuality) for vaginal primacy and its passive aims (1905/1949). Therefore, he believed that "... more constraint has been

applied to the libido when it is pressed in the service of the feminine function..." (Freud, 1933/1964, p. 116).[32]

Regarding anxiety, in Freud's musings on the early history of humankind, when groups were banded together in what he called "primal hordes" (1913/1953, 1921/1955), Freud believed that it was primarily men who experienced anxiety regarding their sexuality due to the prohibitions of the "primal father."[33] Furthermore, Freud continually stressed the greater dynamic importance of castration anxiety in males versus females. Finally, Freud (1920/1963; 1933/1964) believed that male sexuality was typically of a phallic/aggressive nature, while female sexuality was typically of a more passive nature (he also occasionally suggested that libido was "masculine"; Freud, 1935/1971).

Based on these core commitments, the following hypotheses were made:

10) Males will exhibit greater libido than females, and will react to the intensification of incestual wishes with greater censorship and anxiety than females.

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[32] Marie Bonaparte (1953) summarized this view as follows: "In the female, moreover, the libido seems often to have a longer distance to travel to achieve full adaptation to the erotic function for, like a deflected stream, it must, in some degree at least, flow through another channel, since it must change its erotogenic zone and pass, in the main, from the infantile clitoris... to the definitive adult organ, the vagina. We know that some power is generally lost when rivers change their courses. And female libido, called upon to make this extra effort, is *ab anitio* quantitatively less, and therefore less dynamic, than the male" (p. 66, italics in original).

[33] With the advent of the structural theory (e.g., Freud, 1925/1950, 1931/1950, 1933/1964), Freud's ideas in this regard became more definite. For example, he made it clear that males and females have different primary anxieties and degrees of censorship. For males, the threat of castration is the primary anxiety, while for females the external threat of loss of love is primary. Therefore, Freud believed that females would have less intrapsychic sources of anxiety, and therefore less need for mechanisms such as displacement.

11) Males will exhibit more displacement than females.

12) Males will exhibit more significant differences in indicators of anxiety and libido across stimulus objects than females.

13) Males will generate more phallic derivatives than females.

14) Females will generate more vaginal derivatives than males.

Hypothesis 10 was tested with the following prediction:

> Males will exhibit greater evidence for intrapsychic conflict than females.

Hypothesis 11 was tested with the following prediction:

> On the opposite gender parent stimulus object, males will exhibit more displacement than females.

Hypothesis 12 was tested with the following prediction:

> Males will exhibit more significant differences in measures of anxiety and libido across stimulus objects than females.

Hypothesis 13 was tested with the following predictions:

> a) Males will exhibit higher levels of phallic derivatives than females.
> b) Males will exhibit higher levels of phallic displacement on the automobile drawings than females.

Hypothesis 14 was tested with the following prediction:

> Females will exhibit higher levels of vaginal derivatives than males.

METHOD AND PROCEDURE

Participants

Participants included 30 male and 30 female undergraduates at Michigan State University. All participants did all of the figure drawings; however, due to scheduling difficulties and failure to attend the second testing session, only 27 males and 26 females completed the imagery session. All participants were currently enrolled in introductory psychology classes, and participated as a means of earning extra credit. They typically included freshmen and sophomores, with a few upperclassmen as well.

Experimenters

Four experimenters were trained in administering and scoring figure drawings, and in conducting spontaneous imagery sessions. The experimenters included myself and three advanced undergraduate students at Michigan State, all of whom planned on pursuing graduate education and were selected due to their interest in figure drawings and clinical psychology. A fifth experimenter, a psychology graduate of LeMoyne College, was involved in scoring the imagery. Two of the experimenters were male and two were female. All experimenters (except myself) were blind to the experimental hypotheses. However, due to strict adherence to the use of only non-directive probes during the imagery sessions (see

Reyher, 1977; 1978; see also Appendix D), the effects of experimenter bias were minimized.

Procedure

Participants were required to attend two experimental sessions. During the first, they participated in groups. Aside from easing data collection, it was believed that this would lessen the effects of social anxiety (Freud, 1926/1936-- non-Freudian theorists have called this "objective self-awareness"), which has been shown to affect the quality of figure drawings (Roach, 1984; Tobias, 1993). Each participant received a booklet, which had all of the directions written in it. Therefore, the examiner simply handed out the booklets and then collected them when participants were finished. The examiner was dressed casually and acted in a non-authoritarian manner, so as to lessen the effect of their "personal power" (see Hamernik, 1987; Tobias, 1993). In order to lessen further the threat of either social anxiety or narcissistic injury due to the expected evaluation of their drawings (Freud, 1914/1949), participants were instructed not to put their name on the booklets.

Each booklet contained 8 pages, 4 of which were directions and 4 of which were blank pages on which to draw. All participants were asked to draw a complete (no stick figures) picture of an automobile, a person of the opposite gender, their mother, and their father (all participants did all drawings, and the order of drawings was randomized). Following the

completion of each drawing, participants were instructed to draw "anything that comes to mind" on the same page (this was called the "free-drawing"). The booklet had the following directions:

> This booklet will contain all the directions you will need to complete the following exercise. As mentioned in the informed consent sheet, we are interested in studying drawing and imagery. Today you will be doing a number of drawings of human figures, as well as some drawings of whatever you like. This is not a drawing test, so do not worry about your artistic ability. However, for the human figures please draw a whole human figure and not just "stick figures." Please complete the booklet in the order in which you received it, and use the pencil given to you. The following pages should be included in this booklet (Page 1- directions for drawing #1, Page 2- blank page on which to draw, Page 3- directions for drawing #2, Page 4- blank page on which to draw, Page 5- directions for drawing #3, Page 6- blank page on which to draw, Page 7- directions for drawing #4, Page 8- blank page on which to draw). If they are not all here, raise your hand. Otherwise, you may begin, and raise your hand when you are finished.

Examples of some figure drawings and free-drawings can be found in Appendix P.

A few days after drawing, participants were called to return for the final session. This session was done individually, with the experimenter again dressed casually and acting in a non-authoritarian manner. Furthermore, male participants were tested by male experimenters, and female participants were tested by female experimenters (previous research by Acheson [1972] and Roach [1981] found increased anxiety

when the experimenter was the opposite gender from the participant). Participants were met at the laboratory and instructed to sit in a comfortable reclining chair, and asked to find their drawings from a stack of drawings, and then "touch them up" with a pencil (this was assumed to "regenerate" the unconscious fantasy, by having the participants "touch" the body parts again). This involved placing a piece of tracing paper over their original drawings, and asking them to "touch up" the drawing. Participants were then instructed to sit back in the chair, relax, close their eyes, and get a picture in their mind's eye of the drawing. Once they were able to do this, they were instructed to continue to report "whatever images come to mind, as well as any bodily sensations or feelings." Experimenters were instructed to keep their probes to a minimum, and to keep them non-directive, based on Reyher's discussion of "Entrée points" (Reyher, 1978; see Appendix D). Reyher (1978) defines entrée points as follows:

> During the initial interview, the psychotherapist draws the client's attention to dissociated behavior (e.g., a clenched fist) and manifestations of affect and anxiety. These perturbations in the flow of the client's behavior are called entrée points and call for an interpretive observation... An interpretive observation merely draws the client's attention to the behavior in question.... (p. 54)

Aside from these inquiries, probes attempted to get more detail about the imagery. These probes typically included phrases such as "What's in your

mind's eye now?," "Can you describe that in more detail?" This spontaneous imagery continued for a minimum of five minutes, and was no longer than 10 minutes. Following this the participants were asked their opinions regarding the purpose of the study, and were then given a feedback sheet explaining the study in more detail. They were asked if they had any questions, and thanked for their participation.

Measures

Graphic behaviors on human figure drawings. The graphic anxiety measures for the figure drawings were taken from Tobias (1993), which is primarily based on the scale of Handler (1967). These indicators are relatively easy to score, and have demonstrated good inter-rater reliability (see Handler, 1967, and independent confirmation by Attkisson, Waidler, Jeffrey, & Lambert, 1974). Ten of these indicators were scored and then grouped into EGB (shading, erasure, reinforcement, emphasis line) and SGI (omissions, line discontinuity, vertical imbalance, detail, light/heavy line, transparency) according to Reyher (1993a). The only difference between this study and that of Tobias (1993) was that, in accordance with Handler (1967), light/heavy line was scored to reflect a higher score for either light or heavy line. This scale can be found in Appendix E. Although not part of hypothesis testing, the figure drawings were also scored for SIZE, which was simply a measurement from the top to the bottom of the drawing (and from the front to the back of the car). This

variable has led to mixed results in previous research (Handler et al., 1965); therefore this study used it simply to provide further information about it for future research.

Evidence for phallic displacement and castration anxiety on the figure drawings were scored based on the scale of Hammer (1953), which has also demonstrated good reliability and ease of scoring. Hammer's original scale was split into two, one measuring phallic characteristics of the drawings (the PHALLIC scale, made up of #'s 20, 21, 25, 27, 28, 29, 31, 32, 33, 33b, 36b, 38, 39, 43, 44 of Hammer's scale) and one measuring castration derivatives (the CASTRATION scale, made up of #'s 22, 23, 24, 26, 30, 34, 35, 36, 37, 37b, 37c, 40, 41, 42).[34] The PHALLIC subscale examined figure drawings for evidence of displaced phallic characteristics of the drawings, such as elongated nose, large feet, cigarette, etc. The CASTRATION subscale examined figure drawings for symbolic derivatives of castration, such as broken limbs, missing body parts, etc. This scale can be found in Appendix F.

The automobile drawings was scored using a newly developed AUTO scale, which simply rates the automobile in terms of its phallic characteristics. The drawing is rated on a scale from 1 to 5, with 1 being limited phallic characteristics, and 5 being extreme phallic characteristics (see Appendix G for examples of each).

"Free" drawings. The free-drawings, which according to Freud

[34] #'s 33b, 36b, 37b, 37c, and 44 were added by me due to findings from a pilot study.

should serve as derivatives, were scored for their analogical representation to the male and female genitalia, based on Dammann's revision of the "Analogic Replication Scale" (ARS; see Appendix H). This scale has two subscores, one for similarity to the male genitalia (ARSm), and one for the female genitalia (ARSf). Furthermore, the remoteness of these derivatives was scored according to the REMOTE scale of Reyher (see Appendix I). Finally, they were scored for the "function" of the object (castrating, encapsulating, and penetrating) according to the Object Function Scale (OFS-- Dammann, 1995; see Appendix J), which gives the object a score for each of the subscales (OFSc, OFSe, OFSp).

The free-drawings were also scored for EGB's as described above (EGBFREE). As this scale has never been used for scoring non-human drawings, this should be considered a pilot procedure. The free-drawings were not scored for SGI's because, according to Freud's ideas concerning derivative formation (see above), the free-drawings are derivatives, and as such are chosen specifically because they are "allowable" to the censorship. Therefore they should not generate significant intrapsychic anxiety.

Imagery. The imagery was scored for libidinal drive representation according to the LIBIDO subscore of Holt's (1970; 1977) scale for measuring primary process. This scale measures libidinal drive in the following categories: oral, anal, sexual (phallic/genital), exhibitionistic-voyeuristic, homosexual, and "miscellaneous sexual." Furthermore, each drive representation is scored as either Level 1 (primary, direct, intense

drive expression), or Level 2 (socialized drive expression), and given a "Defense Demand" score on a scale of 1 to 6. This "DD" score attempts to rate "...the responses shock value, or the degree to which the vary nature of the underlying idea... demands that some defensive and controlling measure be undertaken in order to make it socially acceptable communication" (Holt, 1970, p. 99). The final score was derived by adding the defense demand for each response, and dividing this total by the number of words in the protocol, in an effort to control for verbiage.[35] For example, participant #34, during imagery to the opposite gender drawing, gave one scorable response with a Defense Demand of 2. Her score was therefore 2/226 (the number of words), or .009. This scale can be found in Appendix L.

Portions of Holt's (1970) scale were also used to score the transcripts for manifestations of disguise and defense (the REMOTE IMAGERY and COVERT scores). Specifically, any word scored for libidinal content was then scored for its remoteness and covertness, as delineated in Appendix M. In addition, the REMOTE IMAGERY scale was altered by adding weights to the scoring categories. This was done in an attempt to quantify

[35] This was done because the amount of time spent on the imagery was different for different participants (between 5 and 10 minutes). Therefore, it was possible that someone who spent more time might get a higher score simply because of the greater time spent talking. A potential problem with this procedure occurred because during data analysis the variable WORDS was occasionally correlated with imagery variables (such as LIBIDO) which had WORDS as their denominator. However, the results were not changed significantly when using the raw score compared with the raw score divided by number of words. Scatterplots of WORDS and RESISTANCE and LIBIDO (the two variables whose raw scores are divided by WORDS and were used in hypothesis testing) can be found in APPENDIX K. These plots suggest that the relationship between LIBIDO and WORDS was still relatively normally distributed, but the relationship between RESISTANCE and WORDS was not (although Spearman correlations are not as affected by non-normal distributions). Therefore, the meaning of the correlation between RESISTANCE and WORDS is somewhat problematic.

the "degree" of remoteness. Theoretically, an animal engaged in some drive activity is more "remote" than a person doing it, and therefore gets a higher weight. The final REMOTE IMAGERY and COVERT scores for each drawing were simply the average of all the scores for that imagery session.

The transcripts were also scored for manifestations of the following defenses, according to Holt's scale: euphemism, undoing, rationalization, negation, minimalization, counterphobic defenses, repudiation or disavowal, obsessional defenses, and isolation. Due to paucity of responses meeting these criteria, however, this score was dropped during analysis. One final score obtained from the Holt scale is labeled the SELFDEP score, and was calculated by summing the number of self-depreciating comments made during each imagery session. Initially, I had hoped to have a separate self-depreciation score for each drawing, but the paucity of scorable responses led to the decision to pool them into one score for each participant.

A revised edition of the castration scale of Schwartz (1991; see also 1955; 1956) was used to score the imagery for castration derivatives (the CASTRATION IMAGERY scale). In this study the following subscales of the Schwartz scale were used: genital loss or injury, damage or loss of other body parts, damage to or loss of extensions of the body image, sexual inadequacy, and extrapsychic threat.[36] As with the LIBIDO score, the

[36] Only these subscales were used as the other subscales were difficult or impossible to derive from Freudian theory.

final score was derived by dividing the number of scorable responses by the total number of words in the protocol. This revised scale can be found in Appendix N.

The imagery was also scored for phallic derivatives (the PHALLIC IMAGERY score), using the scale of Greenberg et al. (1980). A few additional categories, directly derivable from Freud, were added by me to this scale. The final score is derived by dividing the number of scorable responses by the total number of words in the protocol. A copy of this scale can be found in Appendix O.

The imagery was also scored for evidence of resistance, using a scale made up of markers used in previous research (Acheson, 1972; Burns et al., 1976; Moses et al., 1985). This RESISTANCE scale consisted of scoring the transcripts for each instance of the following: fillers such as "mm," "you know," etc., asking questions, failure to finish sentence, pauses, verbal instead of visual associations, image failure (inability to get an image), initially imaging something other than the drawing, symptoms (such as dizziness), and opening eyes. Based on previous research, the following indicators were considered more indicative of resistance, and were therefore given a weight of two: initially imaging something other than the drawing, asking questions, failure to finish sentence, image failure, and opening eyes (all others are scored 1). The RESISTANCE score was simply a numerical summing of these weights, which was then divided by the total number of words.

Finally, the amount of verbiage in the imagery was scored. This WORDS scale was simply the count of the number of words in the imagery to each stimulus object.

Statistical Analyses

Previous research using many of these scales has found the data to be abnormally distributed, leading to the use of non-parametric tests. Therefore, within group data was examined using the Friedman test (which is analogous to the Wilcoxon Matched-Pairs Signed Ranks Tests), between group data was examined using the Mann-Whitney U test, and correlations were examined using the Spearman rank correlation coefficient (Siegel, 1956).

Where appropriate, the Binomial test was used when actual point predictions or rank order predictions were made (Siegel, 1956). For example, hypothesis 1 predicted that the obtained amount of anxiety will be aligned with the predicted order, the "expected order of conflict" (for males, from lowest to highest: auto, father, opposite gender, and mother). The Binomial test was used here because it affords a more "risky" test of the experimental hypotheses than a median or mean comparison. As Meehl (1978) noted, "A theory is corroborated to the extent that we have subjected it to such risky test; the more dangerous the test it has survived, the better it is corroborated" (p. 817). Rank order predictions are such risky tests:

> It is always more valuable to show approximate agreement of observations with a theoretically predicted numerical point value, rank order, or function form, than it is to compute a 'precise probability' that something merely differs from something else. (p. 825)

It should be noted that in the Binomial test "N" refers to the number of observations, not the number of subjects. In this case noted above, there are four observations (an anxiety score on the mother, father, opposite gender, and auto drawings). Therefore, there are 6 comparisons which can be made (3 + 2 + 1), so for Binomial tests with four observations N = 6. For Binomial tests when there are three observations, N = 3 (2 + 1); this poses a problem because even when the three observations come out exactly as predicted, this still does not reach traditional levels of significance. Therefore, predictions involving only three observations can not be tested for statistical significance. Finally, if in examining the medians for ranking, there is a "tie" (if the median for two observations is the same), the mean was used, and if this still revealed a tie, a coin toss determined the order.

RESULTS AND DISCUSSION

This section first presents the inter-rater reliabilities and intercorrelations for the dependent variables. Next, preliminary analyses are reported which examine the variables to assess whether they behaved as expected based on topographic theory. Following these analyses, the viability of the manipulation check is examined. Finally, the experimental hypotheses are revisited with an eye toward the variables which will allow for a fair test, and the resulting analyses are discussed.

Inter-rater reliability

These reliabilities provide a measure of how well the scoring criteria were adhered to for the dependent measures. As mentioned previously, each figure drawing (and the automobile) was scored for ten graphic behaviors; six which make up the SGI scale and four which make up the EGB scale. The reliabilities for these and the other figure drawing variables can be found in Table 1. Table 2 contains the inter-rater reliabilities for the free-drawing variables, and Table 3 contains the inter-rater reliabilities for the imagery variables.

Insert Tables 1-3 about here

Table 1

Inter-rater Reliability for Human and Auto Drawings

(Pearson r correlation)

Variable	Human Figure[a]	Auto[b]
EGB		
Reinforcement	.80	.86
Shading	.89	.88
Erasure	.95	.94
Emphasis Line	.82	.87
SGI		
Transparencies	.96	.94
Vertical Imbalance	.98	.98
Light/Heavy Line	.83	.84
Omissions	.96	.91
Line Discontinuity	.89	.81
Details	.95	.76
PHALLIC	.91	n/a
CASTRATION	.94	n/a
AUTO	n/a	.92

[a] N = 180 drawings [b] N = 60 drawings

Table 2

Inter-rater Reliability for Free-Drawings

(N = 240)

Variable	Pearson r
EGBFREE	
Reinforcement	.76
Shading	.85
Erasure	.95
Emphasis Line	.81
OBJECT FUNCTION SCALE	
Castrating	.83
Penetrating	.76
Encapsulating	.78
ANALOGIC REPLICATION SCALE	
male	.81
female	.72
REMOTE	.92

Table 3

Inter-rater Reliability for Imagery Variables

(N = 212)

Variable	Pearson r
LIBIDO	.91
REMOTE IMAGERY	.81
COVERT	.98
SELFDEP	.96
PHALLIC IMAGERY	.84
CASTRATION IMAGERY	.82
RESISTANCE	.79

Reliability of dependent measures

Traditional psychometric notions regarding reliability of measures are not applicable to Freudian topographic theory due to the influence of displacement, repression, and the constant shift in the interplay of repressive and anti-repressive forces. Therefore we can not expect high levels of reliability across stimulus objects. However, some of the measures did demonstrate adequate reliability for both genders, including all measures on the figure drawings (EGB, SGI, SIZE, CASTRATION, and PHALLIC), and two variables obtained from the imagery (RESISTANCE and WORDS). Interestingly, no variables demonstrated adequate reliability for only one gender (although EGBFREE was close for females; PHALLIC IMAGERY, REMOTE IMAGERY and COVERT were close for males). The intercorrelations for those variables with the highest reliability can be found in Tables 4 and 5.

Insert Tables 4 and 5 about here

Table 4

Intercorrelations of Dependent Measures for Females

(Spearman r statistic)

	EGB1	EGB2	EGB3	EGB4
EGB1[37]	1.000			
EGB2	.689	1.000		
EGB3	.484	.582	1.000	
EGB4	.309	.331	.288	1.000

	SGI1	SGI2	SGI3	SGI4
SGI1	1.000			
SGI2	.406	1.000		
SGI3	.538	.602	1.000	
SGI4	.107	.308	.060	1.000

	SIZE1	SIZE2	SIZE3	SIZE4
SIZE1	1.000			
SIZE2	.880	1.000		
SIZE3	.810	.800	1.000	
SIZE4	.400	.466	.509	1.000

	PHALLIC1	PHALLIC2	PHALLIC3
PHALLIC1	1.000		
PHALLIC2	.003	1.000	
PHALLIC3	.357	.593	1.000

	CASTRAT1	CASTRAT2	CASTRAT3
CASTRAT1	1.000		
CASTRAT2	.763	1.000	
CASTRAT3	.587	.607	1.000

	RESISTA1	RESISTA2	RESISTA3	RESISTA4
RESISTA1	1.000			
RESISTA2	.592	1.000		
RESISTA3	.157	.324	1.000	
RESISTA4	.526	.625	.491	1.000

	WORDS1	WORDS2	WORDS3	WORDS4
WORDS1	1.000			
WORDS2	.646	1.000		
WORDS3	.640	.732	1.000	
WORDS4	.671	.686	.804	1.000

[37] In this, and all following tables, the number following the variable name refers to the drawing; 1 = mother, 2 = father, 3 = opposite gender, 4 = auto.

Table 5

Intercorrelations of Dependent Measures for Males

(Spearman r statistic)

	EGB1	EGB2	EGB3	EGB4
EGB1	1.000			
EGB2	.464	1.000		
EGB3	.332	.419	1.000	
EGB4	.457	.684	.530	1.000

	SGI1	SGI2	SGI3	SGI
SGI1	1.000			
SGI2	.528	1.000		
SGI3	.620	.439	1.000	
SGI4	.301	.169	.112	1.000

	SIZE1	SIZE2	SIZE3	SIZE4
SIZE1	1.000			
SIZE2	.852	1.000		
SIZE3	.779	.887	1.000	
SIZE4	.383	.384	.490	1.000

	PHALLIC1	PHALLIC2	PHALLIC3
PHALLIC1	1.000		
PHALLIC2	.265	1.000	
PHALLIC3	.359	.350	1.000

	CASTRAT1	CASTRAT2	CASTRAT3
CASTRAT1	1.000		
CASTRAT2	.424	1.000	
CASTRAT3	.448	.161	1.000

	RESISTA1	RESISTA2	RESISTA3	RESISTA4
RESISTA1	1.000			
RESISTA2	.458	1.000		
RESISTA3	.273	.607	1.000	
RESISTA4	.266	.271	.221	1.000

	WORDS1	WORDS2	WORDS3	WORDS4
WORDS1	1.000			
WORDS2	.610	1.000		
WORDS3	.567	.311	1.000	
WORDS4	.624	.515	.625	1.000

Preliminary Analyses

The following exploratory analyses were conducted to examine the behavior of the variables in order to assess their compatibility with topographic theory, and whether they provide a fair test of the experimental hypotheses. The first analysis examined correlations between variables within a modality, and the second used factor analysis to examine groupings of variables.

Correlational analysis

In examining correlations for their compatibility with topographic theory, the following caveats must be kept in mind. First, because the data were collected in three different conditions/modalities (drawing, free-drawing, and imagery), we can not assume that similar measures will be positively correlated across conditions. Furthermore, variables which purportedly measure similar processes are often, on close inspection, not conceptually or operationally equivalent. Thus, for example, the CASTRATION variable from the figure drawings measures castration derivatives by examining drawings for missing body parts, etc. The CASTRATION IMAGERY variable, on the other hand, measures castration derivatives in verbal material, and includes references to punishment, damage to "extensions of the body image", etc. As is clear, although these two measure purportedly measure a similar construct, they are in fact quite different. Therefore, in this analysis variables were only

compared within a condition/modality.

In order to simplify this analysis, the data were organized into three "Blocks," hereafter referred to as Block A, Block B, and Block C. All blocks are all within a modality; Block A refers to correlations between all variables related to the figure drawings, Block B refers to all variables related to the free drawings, and Block C refers to all variables related to the imagery. One way to assess whether the flow of mentation (both verbal and graphic), as well as the measures, behaved as expected is to examine the cohesiveness of the variables for a given drawing, within a given block. A simple method for doing this is to arrange the variables above and below a "wish-threat" (w/t) line, with variables above the line supposedly measuring some aspect of a libidinal wish, and those variables below the line supposedly measuring some aspect of threat (see Tobias, 1993). If the variables act as they should, there should be more positive correlations above the w/t line than below, and more negative correlations below the line than above.

Before examining this data, however, one further caveat is needed. Consistent with recent theories regarding the modularity of mind (Fodor, 1983; see also Detterman, 1992), two measures of a construct (e.g., libido) that are correlated at low levels of threat may become negatively correlated at high levels. This is accommodated for in topographic theory because (using libido as an example) it indicates that one of the measures indexes libido which fails to pass the censorship. For example, while EGB

and PHALLIC are theoretically both measures of libido, EGB is non-depictive, while PHALLIC is depictive (Reyher, 1997). According to topographic theory, the non-depictive measure should be less influenced by threat because it can escape the censorship, while the depictive measure will have a more difficult time escaping the censorship, which should be piqued under high threat. Therefore, for males the correlation between EGB and PHALLIC should be positive except under high threat. As indicated in Table 6, this is exactly the case; the correlations were all positive except on the mother drawing (i.e., a high threat situation), when they became negative.

Figure drawings. Table 6 displays the correlation matrix for the figure drawing variables, arranged above and below the wish-threat line, for each drawing. Notice that the variable SIZE is below a dotted line; this is because previous research has demonstrated marked gender differences, as well as conflicting results as to whether it measures anxiety or not (see Handler et. al, 1965). Therefore it was placed separately.

Insert Table 6 about here

Table 6

Intercorrelations in Block A (figure drawing variables)

MALES

Mother drawing

	EGB1	AUTO	PHALLIC1	SGI1	CASTRAT1	SIZE1
EGB1	1.000					
AUTO	.258	1.000				
PHALLIC1	-.178	.284	1.000			
						w/t[38]
SGI1	-.565**	-.321*	-.103	1.000		
CASTRAT1	-.338*	.012	.087	.354*	1.000	
SIZE1	.114	-.294	.033	.106	-.190	1.000

Father drawing

	EGB2	AUTO	PHALLIC2	SGI2	CASTRAT2	SIZE2
EGB2	1.000					
AUTO	.213	1.000				
PHALLIC2	.175	.044	1.000			
						w/t
SGI2	-.278	.104	.169	1.000		
CASTRAT2	-.004	.016	-.122	.058	1.000	
SIZE2	.226	-.209	.242	.110	-.006	1.000

Opposite gender drawing

	EGB3	AUTO	PHALLIC3	SGI3	CASTRAT3	SIZE3
EGB3	1.000					
AUTO	.077	1.000				
PHALLIC3	.291	.193	1.000			
						w/t
SGI3	-.335*	-.404*	-.278	1.000		
CASTRAT3	-.138	-.200	-.205	.252	1.000	
SIZE3	.088	-.328*	-.012	.120	-.133	1.000

Auto drawing

	EGB4	AUTO	SGI4	SIZE4
EGB4	1.000			
AUTO	.263	1.000		
				w/t
SGI4	-.328*	.189	1.000	
SIZE4	.102	.041	-.268	.1.000

*$p < .05$ **$p < .01$, Spearman r statistic

[38] w/t stands for "wish/threat", and indicates the wish-threat line, as described above.

Table 6 (cont.)

FEMALES

Mother drawing

	EGB1	AUTO	PHALLIC1	SGI1	CASTRAT1	SIZE1
EGB1	1.000					
AUTO	-.154	1.000				
PHALLIC1	-.094	-.026	1.000			
SGI1	-.279	.118	.073	1.000		
CASTRAT1	-.263	.138	-.181	.420*	1.000	
SIZE1	.207	.109	.267	.305	.214	1.000

w/t

Father drawing

	EGB2	AUTO	PHALLIC2	SGI2	CASTRAT2	SIZE2
EGB2	1.000					
AUTO	-.156	1.000				
PHALLIC2	.358*	-.280	1.000			
SGI2	-.340*	.201	-.385*	1.000		
CASTRAT2	-.353*	.003	-.580**	.602**	1.000	
SIZE2	-.077	.078	-.461*	.418*	.315	1.000

w/t

Opposite gender drawing

	EGB3	AUTO	PHALLIC3	SGI3	CASTRAT3	SIZE3
EGB3	1.000					
AUTO	.118	1.000				
PHALLIC3	.060	-.180	1.000			
SGI3	-.490**	-.089	-.216	1.000		
CASTRAT3	-.179	.021	-.578**	.596**	1.000	
SIZE3	.146	.212	.108	.422*	.194	1.000

w/t

Auto drawing

	EGB4	AUTO	SGI4	SIZE4
EGB4	1.000			
AUTO	.009	1.000		
SGI4	-.332*	.252	1.000	
SIZE4	-.194	.252	-.012	1.000

w/t

*$p < .05$ **$p < .01$, Spearman r statistic

A cursory examination of Table 6 demonstrates that for the figure drawing data there were many more negative correlations below the line than above the line for males, as expected. In fact, of the ten correlations above the w/t line (where we expect positive correlations), 9 were positive; this is significantly greater than what would be expected by chance (p = .01). Below the w/t line (where we expect negative correlations), 14 of 20 correlations were negative. This just fails to reach traditional levels of significance (p = .06)

For females, by contrast, only 4 of the 12 correlations above the w/t line were positive (p = .83). Thirteen of the 20 correlations below the w/t line were negative, but this failed to reach significance (p = .13). A comparison of the proportion of positive correlations above the w/t line between males and females (see Edwards, 1950) reveals that males exhibited significantly more positive correlations than did females ($p <$ .01). On these findings alone, the variables for the figure drawings are behaving more cohesively (i.e., in accordance with topographic theory) for males than females.

Due to similarities in scoring criteria, however, many of the correlations in Block A must be qualified. The CASTRATION scale includes impoverishment of the drawing (missing parts, parts drawn is if unattached), as does SGI. The PHALLIC scale includes features which improve the drawing, as does EGB (although there are are no similar scoring criteria). Therefore SGI and CASTRATION are expected to be

positively correlated (and negatively correlated with EGB and PHALLIC) due to structural similarity in scoring criteria. However, the obtained correlations in this regard were not uniformly large, and the magnitude of some of them speaks to other factors aside from scoring similarity alone. More importantly, the pattern of these correlations was as expected by topographic theory (e.g., SGI.CASTRATION was positive and highest on the mother drawing for males, and EGB.PHALLIC was positive and highest on the opposite gender-- an acceptable object, and negative on mother-- a high-threat object).

Finally, another problem arises with regard to PHALLIC. Due to scoring criteria, this might be expected to be higher on drawings of the male body because they are more likely to contain things such as pipes, canes, emphasis on fly of pants, etc., all of which are scorable on the PHALLIC scale. Therefore, comparison of this scale across stimulus objects that are different gender is suspect.

Further examination of Table 6 demonstrates that, for males, most variables in Block A appear to be functioning as expected. EGB was negatively correlated with SGI and CASTRATION on all drawings, as it should be. Furthermore, measures of libido and derivatives were positively correlated; EGB and AUTO were positive for all stimulus objects, as they should be, as were AUTO and PHALLIC. The anomalous negative correlation between PHALLIC and EGB on the mother drawing has already been discussed. Finally, SGI and CASTRATION were

positively correlated on all drawings, as they should be, and negatively correlated with PHALLIC. Therefore, for males all variables in Block A are interacting as expected (keeping in mind, however, the structural similarities noted above).

A different story emerges with the females, however. As with males, the correlation between EGB and SGI, and EGB and CASTRATION, was always negative, as expected. Furthermore, the correlation between SGI and CASTRATION was always positive, and quite robust. However, the correlations between EGB and measures of derivatives were not always positive, and in fact the correlations between PHALLIC and AUTO were all negative (unlike for males, when they were uniformly positive, as expected). Therefore, these variables behave differently across genders, highlighting the fact that gender differences will need to be addressed when using these variables to test hypotheses.

Free-drawings. On topographic theory, this same pattern of intercorrelations between variables can not necessarily be expected on the free-drawings (Block B), because, being derivatives (unlike the figure drawings), the free-drawings should not generate conflict. Theoretically, they are compromise formations. However, as with Block A, wish variables should be positively correlated, and negatively correlated with threat variables.

Table 7 shows these correlations.

Insert Table 7 about here

For males, there were again more positive correlations above the w/t line than below. Of the 40 correlations above the line, 34 are positive; this is highly significant ($p < .01$). Of the 40 correlations below the w/t line, however, only 17 were negative, which is non-significant. For females, as with males, 34 of 40 correlations above the w/t line were positive ($p < .01$). Below the w/t line, only 16 of 35 correlations were negative.

As with Block A, however, some of the positive correlations need to be qualified because certain variables have similar scoring criteria. Specifically, OFSp and ARSm share scoring similarities, as do OFSe and ARSf; therefore their positive correlations are to be expected.

Keeping this in mind, for males different measures of derivatives were, for the most part, positively correlated with each other and with EGBFREE (which theoretically measures displaced libido), as they should be. Interestingly, of the six anomalous negative correlations between EGBFREE and derivatives, five of them were on "female" derivatives (ARSf and OFSe); the probability of getting a negative correlation 5 out of 6 times is not greater than what would be expected by chance, however ($p = .11$). Furthermore, for males OFSc was always negatively correlated

Table 7
Intercorrelations in Block B (free-drawing variables)

MALES

Mother drawing

	EGBFREE1	OFSP1	OFSE1	ARSM1	ARSF1	REMOTE1	OFCS1
EGBFREE1	1.000						
OFSP1	.133	1.000					
OFSE1	-.252	.343*	1.000				
ARSM1	.141	.683**	.338*	1.000			
ARSF1	-.271	.017	.380*	.298	1.000		
							w/t
REMOTE1	.429*	.227	.120	.167	-.038	1.000	
OFSC1	-.073	.191	-.193	-.062	-.231	-.298	1.000

Father drawing

	EGBFREE2	OFSP2	OFSE2	ARSM2	ARSF2	REMOTE2	OFSC2
EGBFREE2	1.000						
OFSP2	.085	1.000					
OFSE2	.143	.424*	1.000				
ARSM2	.062	.726**	.290	1.000			
ARSF2	.105	.598**	.773**	.340*	1.000		
							w/t
REMOTE2	.115	-.200	-.399*	-.400*	-.360*	1.000	
OFSC2	.332*	.318*	.107	.228	.195	-.250	1.000

Opposite gender drawing

	EGBFREE3	OFSP3	OFSE3	ARSM3	ARSF3	REMOTE3	OFSC3
EGBFREE3	1.000						
OFSP3	.141	1.000					
OFSE3	-.263	.022	1.000				
ARSM3	.099	.603**	.034	1.000			
ARSF3	-.140	.097	.567**	.415*	1.000		
							w/t
REMOTE3	.314	-.388*	.048	-.486**	-.331*	1.000	
OFSC3	-.103	.392*	.287	.218	.197	-.242	1.000

Auto drawing

	EGBFREE4	OFSP4	OFSE4	ARSM4	ARSF4	REMOTE4	OFSC4
EGBFREE4	1.000						
OFSP4	.168	1.000					
OFSE4	.051	.360*	1.000				
ARSM4	-.143	.598**	.120	1.000			
ARSF4	-.131	.255	.830**	.099	1.000		
							w/t
REMOTE4	.220	-.305	-.120	-.528**	-.061	1.000	
OFSC4	.061	.266	.288	.097	.299	-.249	1.000

*$p < .05$ **$p < .01$, Spearman r statistic

Table 7 (cont.)

FEMALES

Mother drawing

	EGBFREE1	OFSP1	OFSE1	ARSM1	ARSF1	REMOTE1	OFSC1
EGBFREE1	1.000						
OFSP1	.043	1.000					
OFSE1	.072	-.040	1.000				
ARSM1	.107	.792**	-.192	1.000			
ARSF1	.332*	.384*	.446**	.449**	1.000		
							w/t
REMOTE1	.088	.035	-.014	.063	.004	1.000	
OFSC1	.023	.335*	-.224	.196	.130	.233	1.000

Father drawing

	EGBFREE2	OFSP2	OFSE2	ARSM2	ARSF2	REMOTE2	OFSC2
EGBFREE2	1.000						
OFSP2	.040	1.000					
OFSE2	.229	-.320*	1.000				
ARSM2	-.096	.576**	-.041	1.000			
ARSF2	.216	.019	.355*	.006	1.000		
							w/t
REMOTE2	-.089	.281	-.381*	.018	-.014	1.000	
OFSC2	.269	.259	.033	.283	.149	-.105	1.000

Opposite gender drawing

	EGBFREE3	OFSP3	OFSE3	ARSM3	ARSF3	REMOTE3	OFSC3
EGBFREE3	1.000						
OFSP3	.289	1.000					
OFSE3	.123	.018	1.000				
ARSM3	.230	.337*	.091	1.000			
ARSF3	.200	-.006	.669**	.416*	1.000		
							w/t
REMOTE3	-.259	.089	-.326*	-.061	-.313*	1.000	
OFSC3	.218	-.070	-.076	-.157	-.195	-.333*	1.000

Auto drawing

	EGBFREE4	OFSP4	OFSE4	ARSM4	ARSF4	REMOTE4	OFSC4
EGBFREE4	1.000						
OFSP4	.043	1.000					
OFSE4	.100	.079	1.000				
ARSM4	.051	.464**	.513**	1.000			
ARSF4	.155	.069	.547**	.284	1.000		
							w/t
REMOTE4	-.047	.320*	-.167	.021	-.335*	1.000	
OFSC4[a]	n/a	n/a	n/a	n/a	n/a	n/a	n/a

*$p < .05$ **$p < .01$, Spearman r statistic

[a] There were no scorable responses for this variable on the auto drawing.

with REMOTE, as it should be (increasing blatancy of derivatives should theoretically be associated with increasing anxiety). Another way of looking at this correlation is that perhaps these derivatives are successful compromise formations, and therefore do not arouse significant castration anxiety, as would be expected from topographic theory.

These findings needs to be qualified, however, due to problems with the variable OFSc. For example, the positive correlation between OFSc and other measures of derivatives is probably an artifact; things scored as penetrating (OFSp) are also scored as castrating (e.g., knife). This positive correlation was not always present for women participants, however, so it is not simply a function of scoring similarities. Furthermore, for males only with the mother stimulus object was the correlation between OFSc and other derivatives negative. However, on further scrutiny OFSc appears to be measuring phallic aggression rather than castration per se; note (Appendix J) that this scale measures both derivatives of castration (e.g., broken tree limb) and objects which can castrate (e.g., a knife). In examining the free-drawings, it became clear that there were very few responses scored for "being castrated," and most of the scorable material was castrating objects. Therefore, predictions that involve the variable OFSc should be considered suspect, because it is likely that it is not measuring what it was supposed to.

A with Block A, gender differences were apparent. For example, unlike for males, measures of "female" derivatives (OFSe and ARSf) were

positively correlated with EGBFREE on all stimulus objects (this is significantly greater than what would be expected by chance; $p = .02$).[39] Furthermore, for males EGBFREE was positively correlated with REMOTE on all stimulus objects, while for females this correlation was negative on three of the four.

One final difficulty with the variables in Block B is that, as with the variable PHALLIC in Block A, each stimulus object sets up its own possible derivatives, so it is difficult to compare derivatives across objects. For example, it is more likely following the father drawing to draw a drill press, which would get high scores on the OFSp scale, than following the mother drawing. However, according to Freud all mentation is psychically determined, and related to whatever unconscious wish is piqued at the moment. Furthermore, examination of means and medians revealed that phallic derivatives are not always higher following male vs. female objects, and some "phallic" derivatives scores were in fact higher (although not significantly so) following the auto drawing than any of the human figure drawings. This is not to deny the "stimulus pull" of the objects, but simply to point out that the pull of the stimulus object does not account for all of the variance in derivative scores.

[39] While not coming from a classically Freudian perspective, later psychoanalytic theorists (e.g., Stoller, 1977; Mayer, 1995; see Appendix C) might conclude that this demonstrates the existence of "primary femininity", and the fact that females have cathected their own genitals and do not simply view themselves as "castrated." This will be discussed further in the General Discussion section.

Imagery. The imagery variables (Block C) are even more problematic because there is no way to assure that the obtained verbal report is really generated by the conflicts induced during the figure drawing (this will be examined empirically below). Although subjects were asked to "touch up" the drawings immediately prior to the imagery, there is the possibility that the imagery could instead by generated by the same intrapsychic source of dreams, and be unrelated to the drawing at hand. Furthermore, the recording of imagery relies on self-report, a notoriously problematic source of data. Finally, previous research (Moses et al., 1985) has demonstrated that what is reported as imagery is often not if fact imagery at all, and is instead is simply verbal associations.

Despite these problems, however, the same analyses were undertaken. Table 8 shows these variables; note that WORDS is above the wish/threat line. This is because, on Freud's view, words (and thinking in general) are compromise formations (derivatives), and therefore conduits for disguised gratification.

Insert Table 8 about here

Table 8

Intercorrelations in Block C (imagery variables)

MALES

Mother drawing

	LIBIDO1	PHA.IM.1	WORDS1	REM.IM.1	COVERT1	CAST.IM.1	RESISTA1	SELFD
LIBIDO1	1.000							
PHA.IM.1	.104	1.000						
WORDS1	.397*	.179	1.000					
								w/t
REM.IM.1	.040	.058	.022	1.000				
COVERT1	-.199	-.088	.055	.822**	1.000			
CAST.IM.1	-.151	.051	.146	-.026	.019	1.000		
RESISTA1	-.275	-.035	-.606**	-.211	-.162	-.175	1.000	
SELFD	-.301	.000	-.199	.533*	.358	-.254	254	1.000

Father drawing

	LIBIDO2	PHA.IM.2	WORDS2	REM.IM.2	COVERT2	CAST.IM.2	RESISTA2	SELFD
LIBIDO2	1.000							
PHA.IM.2	.005	1.000						
WORDS2	.095	-.213	1.000					
								w/t
REM.IM.2	-.150	.126	.002	1.000				
COVERT2	-.131	.116	.078	.737**	1.000			
CAST.IM.2	.030	.383*	.139	.349*	.291	1.000		
RESISTA2	-.014	.125	-.273	.082	-.054	.168	1.000	
SELFD	-.457*	-.017	-.221	.117	-.084	-.234	.128	1.000

Opposite gender drawing

	LIBIDO3	PHA.IM.3	WORDS3	REM.IM.3	COVERT3	CAST.IM.3	RESISTA3	SELFD
LIBIDO3	1.000							
PHA.IM.3	-.223	1.00						
WORDS3	-.192	.327	1.000					
								w/t
REM.IM.3	.107	.321	.209	1.000				
COVERT3	-.524**	.538**	.296	.381*	1.000			
CAST.IM.3	-.020	.372*	.158	.460*	.207	1.000		
RESISTA3	-.245	-.297	-.226	.174	.031	-.046	1.000	
SELFDEP	.162	-.111	-.124	.188	-.370*	.391*	.059	1.000

Table 8 (cont.)

Auto drawing

	LIBIDO4	PHA.IM.4	WORDS4	REM.IM.4	COVERT4	CAST.IM.4	RESISTA4	SELFD
LIBIDO4	1.000							
PHA.IM.4	.054	1.000						
WORDS4	.270	-.063	1.000					
								w/t
REM.IM.4	.179	.511*	-.367	1.000				
COVERT4	-.249	.187	.026	.458*	1.000			
CAST.IM.4	.132	-.025	.232	-.070	-.296	1.000		
RESISTA	-.151	-.350*	-.050	-.401*	-.065	.118	1.000	
SELFDEP	-.291	.029	-.236	.414*	.327	.301	.086	1.000

*$p < .05$ **$p < .01$, Spearman r statistic

FEMALES

Mother drawing

	LIBIDO1	PHA.IM.1	WORDS1	REM.IM.1	COVERT1	CAST.IM.1	RESISTA1	SELFD
LIBIDO1	1.000							
PHA.IM.1	-.487**	1.000						
WORDS1	.071	-.056	1.000					
								w/t
REM.IM.1	-.485*	.609**	.181	1.000				
COVERT1	-.361	.528**	-.003	.658**	1.000			
CAST.IM.1	.132	.064	.295	.251	.088	1.000		
RESISTA1	-.104	-.050	-.346*	-.220	.161	-.018	1.000	
SELFDEP	.145	-.119	.134	-.221	.168	.050	.190	1.000

Father drawing

	LIBIDO2	PHA.IM.2	WORDS2	REM.IM.2	COVERT2	CAST.IM.2	RESISTA2	SELFD
LIBIDO2	1.000							
PHA.IM.2	-.002	1.000						
WORDS2	.592**	.228	1.000					
								w/t
REM.IM.2	.598**	.222	.274	1.000				
COVERT2	.207	.340	.075	.271	1.000			
CAST.IM.2	.148	-.046	-.131	.058	-.113	1.000		
RESISTA2	-.419*	-.212	-.356*	-.615**	-.042	-.185	1.000	
SELFDEP	-.282	.060	-.057	-.353	-.353	-.020	.211	1.000

Table 8 (cont.)

Opposite gender drawing

	LIBIDO3	PHA.IM.3	WORDS3	REM.IM.3	COVERT3	CAST.IM.3	RESISTA3	SELFD
LIBIDO3	1.000							
PHA.IM.3	-.081	1.000						
WORDS3	.004	-.494**	1.000					
								w/t
REM.IM.3	-.002	.289	-.056	1.000				
COVERT3	-.374*	.096	-.064	.529**	1.000			
CAST.IM.3	-.081	.197	.144	.134	.178	1.000		
RESISTA3	-.097	.186	-.425*	-.215	.106	.071	1.000	
SELFDEP	-.161	.042	-.121	-.367*	-.084	-.164	.027	1.000

Auto drawing

	LIBIDO4	PHA.IM.4	WORDS4	REM.IM.4	COVERT4	CAST.IM.4	RESISTA4	SELFD
LIBIDO4	1.000							
PHA.IM.4	-.405*	1.000						
WORDS4	.231	-.238	1.000					
								w/t
REM.IM.4	.024	.321	.299	1.000				
COVERT4	-.296	.134	.128	.801**	1.000			
CAST.IM.4	.207	.017	.339*	.288	.075	1.000		
RESISTA4	-.324	.234	-.461**	-.120	.193	-.315	1.000	
SELFDEP	-.055	.396*	-.105	.381	.036	.071	.247	1.000

*$p < .05$ **$p < .01$, Spearman r statistic

A cursory examination of the correlations reveals that the variables were not acting as cohesively for either gender as in other Blocks. For males, of the 12 correlations above the w/t line, 8 were positive ($p = .19$). Below the line, only 44 of 100 correlations were negative ($p > .05$). For females, 5 of the 12 correlations above the w/t line were positive ($p = .81$), and 41 of the 100 correlations below the w/t line were negative ($p > .05$). Despite this, for both genders many of the variables entered into theoretically consistent relationships. As expected, the correlation between LIBIDO and RESISTANCE was always negative, as was the correlation between RESISTANCE and WORDS. Furthermore, as expected for both genders the correlation between RESISTANCE and SELFDEP was always positive.[40] Furthermore, because SELFDEP theoretically indexes the harshness of the ego ideal, which is involved in repression, it should be negatively correlated with LIBIDO, which it was for males on all stimulus objects except the opposite gender, and for females on all objects except mother. Furthermore, SELFDEP and WORDS was negatively correlated on all stimulus objects for males, and 3 of 4 for females, as expected (the odds of getting 7 negative correlations out of eight is significantly greater

[40] This reflects the fact that SELFDEP is considered a good measure of the ego ideal, based on Freud's (1914/1949) notions regarding the censorship and conscience. According to Freud, conscience monitors the ego and ensures that needed narcissistic supplies are secured from the ego ideal. An averse reaction occurs when the ego fails to live up to the expectations of the ego ideal, and self depreciation is considered an excellent marker of this adverse reaction: "It is not so obvious, but nevertheless very probable, that the misery of the melancholiac is the expression of a sharp conflict between the two faculties of his ego, a conflict in which the ideal, in an excess of sensitiveness, relentlessly exhibits its condemnation of the ego in delusions of inferiority *and in self-depreciation*" (italics mine, Freud, 1921/1948, p. 107). The ego ideal is also described as the seat of "...self-observation, the moral conscience, the censorship of dreams, *and the chief influence in repression*" (italics mine, Freud, 1921/1948, p. 69); therefore the positive correlation between RESISTANCE and SELFDEP.

than what would be expected by chance, $p = .04$). Also, for females LIBIDO was positively correlated with WORDS on all stimulus objects, and this correlation was positive on 3 of 4 objects for males (with both genders combined; $p = .04$). One unexpected finding was that for both genders COVERT tended to be negatively correlated with LIBIDO, while REMOTE IMAGERY tended to be positively correlated with LIBIDO. This finding is especially surprising given the consistent and robust positive correlations between COVERT and REMOTE IMAGERY.

As with the other blocks, some problems with the variables need to be addressed. First, due to the paucity of responses scorable on the CASTRATION IMAGERY scale, there was a gross restriction of range in scores. Therefore all hypotheses that include this variable are considered suspect. Furthermore, the variables COVERT and REMOTE IMAGERY are both simply averages of the covertness and remoteness of derivatives in an imagery session, and are therefore very "rough" measures. It is therefore somewhat surprising (although theoretically expected) that REMOTE IMAGERY and COVERT were so powerfully correlated. Note (Appendix L) that REMOTE IMAGERY indexes the degree of "distance" between the subject and the libidinal material (e.g., "the dog kissed the girl" is more "distant", and therefore theoretically more remote, than "I kissed the girl"). This conceptualization of defense is more in line with psychoanalytic ego psychology then with Freud's topographic notions regarding defense and compromise formations. The COVERT scale, on

the other hand, indexes the degree of blatancy of the drive ("I ate the cake" is more blatant than "I thought about eating the cake"). As is evident, they are measuring remoteness in somewhat different ways, and their large positive correlations are therefore interesting.

Although both REMOTE IMAGERY and CASTRATION IMAGERY were initially chosen for this study based on the previous research that has used them, further scrutiny revealed that they are both *potpourris* of different categories which, based on Holt's (1970) and Schwartz's (1955) understanding of psychoanalytic ego-psychology, are theoretically related to the variable at hand. However, they are not theoretically consistent, and are both difficult to derive from Freud's topographic theory. Therefore, predictions involving both of them are considered suspect.

Finally, as with other blocks, there were a few relationships which demonstrated gender differences. For example, the correlation between PHALLIC IMAGERY and LIBIDO was positive on three of four stimulus objects for males, but was uniformly negative for females. This finding is especially interesting because it corresponds with the aforementioned gender difference in the relationship between EGBFREE and derivatives in Block B (see footnote 39).

In summary, this analysis revealed that many of the variables were interacting in theoretically consistent ways. The only variables which clearly do not offer a fair test of the experimental hypotheses are OFSc,

CASTRATION IMAGERY, and REMOTE IMAGERY. Furthermore, it is clear that gender differences are prevalent, and, at least in Block A (figure drawings), males are more cohesive than females. This should not be altogether surprising, however; Freud admitted that his thoughts about female development were "... incomplete and fragmentary..." (1933, p. 119), and many of his ideas are based on male psychosexual development.

Factor analysis

In order to further examine the relationship between the variables, factor analyses were run, by gender, on the entire data set, and for each drawing individually. Due to the low N and the large number of variables, this should be considered an exploratory procedure with few claims for validity. With this caveat in mind, however, these results, if in accord with findings from other analyses, might lend further credence to other findings. With all of the following factor analyses, a somewhat arbitrary limit was set at five factors, because beyond that the factors became incomprehensible. In fact, most of the solutions proved incomprehensible beyond two factors. Rather than burden the reader with larger tables of factor solutions, I will summarize the variables that demonstrated large positive and large negative loadings for each factor that was clearly definable.

Entire data set. Using the entire data set, in comparing males and females the first factor was quite different. For males, the first factor

included indirect measures of libido, and was low on anxiety, with large positive loadings for EGB, REMOTE IMAGERY and COVERT, and large negative loadings for SGI and CASTRATION. For females, on the other hand, the first factor was clearly anxiety, with large positive loadings for SGI, CASTRATION, SIZE, and SELFDEP, and negative loadings on EGB and other measures of libido. The second factor for males appeared to index phallic derivatives, and demonstrated large positive loadings on PHALLIC IMAGERY and ARSm, and large negative loadings on EGB and LIBIDO. For females the second factor appeared to index "vaginal" derivatives, with large positive loadings for OFSe and ARSf, as well as WORDS, and large negative loadings for PHALLIC IMAGERY and COVERT. Factors beyond these two were difficult to interpret, and will therefore not be discussed here. On these findings alone, however, there again appears to be important gender differences.

Mother drawing. The factor analysis for variables related to the mother drawing was somewhat more difficult to interpret. For males, the first factor appeared to index anxiety and remoteness (large positive loadings for SGI, CASTRATION, and REMOTE IMAGERY, and large negative loadings for EGB and LIBIDO). The second factor indexed phallic derivatives, with large positive loadings on OFSp, PHALLIC, and ARSm. For females, the first factor also indexed remoteness (large positive loadings on COVERT and REMOTE IMAGERY), but the second factor was difficult to interpret.

Father drawing. On the father drawing, for males the first factor indexed derivatives (both vaginal and phallic; large positive loadings for ARSf, OFSe, PHALLIC), while the second factor indexed libido and phallic derivatives (large positive loadings for EGB, OFSp, ARSm, EGBFREE, and large negative loadings for SGI, CASTRATION). For females, the first factor was clearly libido, with large loadings on EGB and LIBIDO, and large negative loadings on SGI, CASTRATION, SIZE, and SELFDEP.

Opposite gender drawing. The opposite gender drawings also demonstrated gender differences. For males the first factor indexed derivatives (both phallic and vaginal), while for females the first factor indexed anxiety and had large negative loadings for derivatives (both phallic and vaginal). Other factors were difficult to interpret.

Auto drawing. Finally, on the auto drawing, for males the first factor indexed libido and phallic derivatives (large positive loadings for EGB, LIBIDO, OFSp, PHALLIC, ARSm), while the second factor indexed vaginal derivatives and anxiety (large positive loadings on OFSe, ARSf, and SGI). For females, the factors were difficult to interpret, and no clear anxiety or libido factors emerged.

In summary, these factor analyses lend further credence to the ubiquitous and important gender differences in the behavior of the variables and their interaction with stimulus object.

Further gender differences

Based on these results, it seemed prudent to examine these gender differences in relationships between variables, and see if they were consistent with topographic theory. Specifically, according to topographic theory variables which index psychic agencies (structure) thought to have similar functions across gender, such as the ego ideal, should exhibit less gender differences than variables which index functions (the output of these structures) which differ across gender, such as castration anxiety (recall that according to Freud [1924/1949], for males castration is the punishment for Oedipal wishes, while for females the supposed castration has already taken place, and is therefore unrelated to Oedipal wishes).

Based on topographic theory, the following variables were predicted to demonstrate few gender differences: RESISTANCE, EGB, SGI, REMOTE, REMOTE IMAGERY, and COVERT. The theoretical reason for predicting few gender differences on RESISTANCE is that it is related to the ego ideal and conscience, which serves a similar function for both males and females; EGB is expected to demonstrate few gender differences because it indexes libido which originates in instincts (not a psychic structure). Moreover, EGB is comprised of graphic behaviors which are non-depictive, and should therefore escape detection by the censorship. Finally, EGB also indexes the ego-instincts (and efforts to do a good job), which according to Freud function similarly for both genders. SGI is expected to demonstrate few gender differences because it measures

anxiety, which according Freud is, for both genders, brought about by the ego's anticipation of a "traumatic state" when it is overwhelmed by excitation. The three measures of remoteness are expected to demonstrate few gender differences because they all function to enable derivatives to escape the censorship, a process which, according to Freud, is similar for both genders.

In contrast, measures of castration anxiety (CASTRATION, OFSc, and CASTRATION IMAGERY), derivatives (LIBIDO, PHALLIC, AUTO, PHALLIC IMAGERY, ARS and OFS), displaced libido (EGBFREE), and worthlessness (SELFDEP) should demonstrate greater gender differences. The reason for expecting measures of castration anxiety to demonstrate gender differences has already been discussed. Derivatives should demonstrate gender differences because, according to Freud, they represent different fates of instincts which differ across gender. For example, for males phallic derivatives may serve narcissistic aims, while for females they may be more related to "penis envy." Because LIBIDO is really a measure of derivatives and partial instincts, it is also expected to demonstrate greater gender differences. Measures of displaced libido should exhibit gender differences because the impetus for displacement (castration anxiety) functions differently for each gender, as described above. Finally, feelings of worthlessness have different sources and levels of intensity for males and females; according to Freud, for females they stem from their lack of a penis, and are more intense than for

males; for males they can stem from, among other things, narcissistic injury due to comparison of the little boys penis with that of his father.

In order to examine these gender differences for each variable, an "Agreement" score was created. This score was obtained by examining the sign of each correlation between all pairs of variables for each drawing. For each pair of variables, there are four correlations (one for each stimulus object), except for those variables which were not applicable to the auto drawing (when there are three correlations). Of these four (or three) correlations, those with similar sign across gender were counted, giving a number from 0 to 4 (or 0 to 3). For example, the correlation between SGI and EGB is negative on all drawings, for both genders, and therefore demonstrates "agreement" in sign on all four drawings. This number is then transformed into the "Agreement" score as shown in Table 9.

Insert Table 9 about here

According to this figure, the preceding example, which showed agreement on four out of four drawings, would get an agreement score of 9. The variables SGI and PHALLIC show agreement in sign only on the opposite gender drawing, and because this correlation is based on three drawings

(there is no PHALLIC score on the automobile), Table 9 reveals an agreement score of 4. When none of the correlations for a pair of variables have a similar sign across gender, the agreement score would be 1 or 2, depending on the number of drawings. Therefore a higher "Agreement" score indicates greater agreement between genders in the sign of correlations; i.e., less gender differences.

Table 9

Calculation of Agreement Score

# of correlations with similar sign across gender (4 drawings)	(3 drawings)[41]	Agreement score
4		9
	3	8
3		7
	2	6
2		5
	1	4
1		3
	0	2
0		1

Table 10 gives the means and ranks for the agreement scores, ordered according to theoretical expectation of high or low agreement, as discussed above (from 1 [lowest] to 20 [highest]). SIZE was not included in this table, due to the aforementioned conflicting results as to whether it actually measures wish or anxiety.

[41] This was for variables such as PHALLIC which is not scored on the auto drawings.

Insert Table 10 about here

Examination of the table reveals that those variables which theoretically were expected to demonstrate greater agreement across genders were typically ranked high. RESISTANCE was in fact highest, while SGI was second highest. EGB was ranked 17th; COVERT was ranked 19th. Thus, these variables can be used to test nomothetic relationships. The only variable which ranked low, against expectations, was REMOTE (ranked 6th).

Table 10

Mean and Rank for the Agreement Score

Variables expected to be ranked high

	RESISTA.	EGB	SGI	REMOTE	REM. IM.	COVERT	WORDS
MEAN	6.381	5.550	5.905	4.952	5.333	5.854	5.238
RANK*	20	16	19	6	11	18	9

Variables expected to be ranked low

	CASTRAT.	OFSC	CAST. IM.	LIBIDO	PHALLIC	AUTO	PHAL. IM.	ARSm
MEAN	5.048	4.905	5.095	4.571	5.333	5.450	4.714	5.650
RANK	7	5	8	1	10	14	2	17

	ARSF	OFSP	OFSE	EGBFREE	SELFDEP
MEAN	5.550	5.350	5.350	4.850	4.750
RANK	15	13	12	4	3

*RANK refers to the ranking of the means; 1 is lowest, 22 is highest

Variables which theoretically should demonstrate little agreement include measures of displaced libido, castration anxiety, self depreciation, and derivatives. As shown in Table 10, most of these ranks were low, as expected. LIBIDO was in fact ranked 1, and SELFDEP was 2. EGBFREE was ranked 4, and all three castration anxiety variables were ranked relatively low (5, 8, and 9). Measures of derivatives were typically in the middle of the pack. ARSm and ARSf, however, were ranked high (18th and 16th, respectively), against expectations.

In order to examine whether the theoretical grouping of variables into "high" and "low" was corroborated by the data, a Kruskal-Wallis analysis of variance was done on the rank sums of the agreement score for each "group" (high agreement and low agreement), as delineated above. This analysis demonstrated that the groups did differ significantly on the Agreement score, as expected; $U(1, 20) = 71.00$, $p = .04$.

Manipulation Checks

To ensure a fair test of the experimental hypotheses, we must first ascertain weather the manipulation of the independent variable (stimulus object) was successful. Recall that the different stimulus objects were theoretically expected to generate different levels of intrapsychic conflict in accordance with the "expected order of conflict." To reiterate, it was expected that the opposite gender parent drawing, being the Oedipal object, would generate the most intrapsychic threat. The opposite gender drawing

should generate less conflict than the Oedipal object, but, because it can be a "stand-in" for the Oedipal object, should still be conflict inducing. The same-gender parent drawing, being even more remote from the Oedipal object, should generate less.[42] Finally, the automobile drawing, because it does not involve touching a human body, should generate the least conflict. Therefore, for males the predicted order of magnitude for all measures of conflict and anxiety was, from lowest to highest: auto, father, opposite gender, mother. For females the orders are the same as for males, except that mother and father are switched.

The success of this manipulation was assessed in two ways, the first using measures of central tendency and the second using measures of association between variables.

Measures of central tendency. One direct way to assess the success of the manipulation was to compare the medians for some of the variables across objects. If the "manipulation" was successful, the magnitude of variables such as EGB and SGI should demonstrate significant differences

[42] After formulating the hypotheses, another perspective called into question the order for the level of conflict between the opposite gender drawing and same gender parent drawings. This is because it could also be predicted, based on the core commitments, that the same gender parent would be more conflict-inducing than the opposite gender drawing. This would occur because touching the same gender parent might generate homosexual wishes tied to the "inverted" Oedipus complex. Furthermore, the opposite gender drawing is technically a derivative, because there are few constraints on what the person can draw (they can draw any opposite gender person). This is not the case for the parent. However, as the hypotheses were already formulated, and the original order is derivable from Freud's Oedipal theory, it was left as originally presented, with the new order set up as a "rival" hypothesis. All of the following predictions will follow from the originally predicted order; if the "rival" order proves better, it will be noted. The "rival" order is, from lowest to highest: auto, opposite gender, same-gender parent, and opposite gender parent. The effectiveness of each order will be addressed in the General Discussion section.

across objects.

To determine if either or both EGB and SGI would differentiate the stimulus objects, separate Friedman analyses of variance (analogous to a repeated-measures ANOVA) were conducted. As shown in Table 11, neither was significant for either gender.

Insert Table 11 about here

Table 11

Friedman Test for EGB and SGI on All Drawings

Males		Females	
Variable	Rank sum	Variable	Rank sum
EGB1	75.50	EGB1	73.50
EGB2	67.00	EGB2	79.00
EGB3	88.00	EGB3	86.00
EGB4	69.50	EGB4	61.50
χr^2 (3,30) =	5.270, p = .153	χr^2 (3, 30) =	6.430, p = .092
Variable	Rank sum	Variable	Rank sum
SGI1	84.00	SGI1	83.50
SGI2	65.50	SGI2	68.50
SGI3	73.00	SGI3	65.00
SGI4	77.50	SGI4	83.00
χr^2 (3,30) =	3.63, p = .304	χr^2 (3, 30) =	5.570, p = .135

However, because the four stimulus objects are quite different, they may pull for different kinds of embellishments, graphic behaviors, etc., making comparison of EGB, SGI, and other figure drawing variables across objects problematic. The only unconfounded comparison is between the opposite gender and the opposite gender parent drawing, because they are both the same gender, and might therefore pull for similar graphic behaviors and embellishments of the drawings (e.g., jewelry on the female and mother drawings). Therefore, if the "manipulation" of sexual arousal and conflict was successful, Friedman tests should reveal lower libido (EGB) and higher anxiety (SGI) on the opposite gender parent compared to the opposite gender drawings. Table 12 shows that these comparisons were not significant for males or females. For males, however, all comparisons were in the expected direction.

Insert Table 12 about here

Table 12

Comparison of SGI and EGB on Opposite Gender and Parent Drawings

Males

Variable	Rank sum	Variable	Rank sum
SGI1	48.50	EGB1	42.00
SGI3	41.50	EGB3	48.00
χr^2 (1, 30) = 1.63, p = .20		χr^2 (1, 30) = 1.20, p = .27	

Females

Variable	Rank sum	Variable	Rank sum
SGI2	44.00	EGB2	44.00
SGI3	46.00	EGB3	46.00
χr^2 (1, 30) = 0.13, p = .72		χr^2 (1, 30) = 0.13, p = .72	

Because variables obtained in the imagery condition are somewhat removed from the figure drawings, and are assessing derivatives in verbal discourse rather than graphic behavior, it seemed reasonable that comparison across objects would be more valid in this condition than comparing objects by using figure drawing variables, due to the lesser influence of "stimulus pull." Therefore, Friedman tests were also conducted using the imagery variables which most correspond with EGB and SGI, namely, LIBIDO and RESISTANCE. These results can be found in Table 13.

Insert Table 13 about here

As is evident from Table 13, the variable LIBIDO did demonstrate significant differences across objects for females, and the Friedman test was close to being significant for males. Further exploration of the LIBIDO data demonstrated that for females scores on the opposite gender drawing were significantly higher than on the father drawing, as expected χr^2 (1, 26) = 5.54, p = .02 (because the opposite gender is an "acceptable" object to the censorship).

In summary, when using measures of central tendency the manipulation did not appear to have been as productive as hoped.

Table 13

Friedman Test of LIBIDO and RESISTANCE

Males

Variable	Rank sum	Variable	Rank sum
RESISTA1	73.50	LIBIDO1	70.50
RESISTA2	56.00	LIBIDO2	63.00
RESISTA3	70.50	LIBIDO3	74.00
RESISTA4	60.00	LIBIDO4	52.50

χr^2 (3, 26[43]) = 4.81, p = .19 χr^2 (3, 26) = 6.27, p = .10

Females

Variable	Rank sum	Variable	Rank sum
RESISTA1	72.00	LIBIDO1	66.50
RESISTA2	65.00	LIBIDO2	55.50
RESISTA3	69.50	LIBIDO3	82.50
RESISTA4	53.50	LIBIDO4	55.50

χr^2 (3, 26) = 4.65, p = .20 χr^2 (3, 26) = 11.29, p = .01

[43] As mentioned previously, not all subjects did the imagery, so the sample size for many of the following tests will vary. Furthermore, for some of the variables (such as COVERT), not all subjects received a score because if they had no scorable libidinal material, they could not receive a REMOTE IMAGERY or COVERT score. This further lowered the sample size for some of the following tests.

Measures of association. Based on topographic theory, assessing single variables of wish or threat/prohibition in isolation (as was just done) is problematic because, according to Freud, wish and prohibition are always tied to each other; they are opposing processes (repressive vs. anti-repressive forces). One does not exist without the other, although the degree of prominence of one or the other varies from moment to moment (Freud, 1915b/1949, referred to this phenomenon as the "specific" nature of repression). Therefore, a better manipulation check is to examine the correlations between pairs of variables which measure wish and prohibition.

The quintessential measure of these opposed processes on the figure drawings is the correlation between EGB and SGI, which theoretically should index the degree of conflict. Because they are measuring opposed processes (wish and threat), we expect them to be negatively correlated. Furthermore, if the "manipulation" was successful, we expect the empirical ordering of obtained magnitudes of these negative correlations to match our predicted order. As shown in Table 14 below, these correlations were all negative, and the order of magnitude (from lowest to highest: father, auto, opposite gender, mother) was close to the "expected" order (Binomial test N = 6, x = 1; $p = .11$).

Insert Table 14 about here

Table 14

Correlations and Kendall's *W* for Variables of Opposed Processes

Variables	Males		Females	
EGB.SGI	A* -.33 (2)	A -.33 (2)	A -.33 (2)	A -.33 (2)
	F -.28 (1)	O -.34 (3)	M -.28 (1)	O -.49 (4)
	O -.34 (3)	F -.28 (1)	O -.49 (4)	M -.28 (1)
	M -.57 (4)	M -.57 (4)	F -.34 (3)	F -.34 (3)
	W = .90	*W* = .70	*W* = .80	*W* = .50
	r = .80	*r* = .40	*r* = .60	*r* = 0.0
EGB.CASTRATION	A n/a	A n/a	A n/a	A n/a
	F -.01 (1)	O -.14 (2)	M -.26 (2)	O -.18 (1)
	O -.14 (2)	F -.01 (1)	O -.18 (1)	M -.26 (2)
	M -.34 (3)	M -.34 (3)	F -.35 (3)	F -.35 (3)
	W = 1.0	*W* = .58	*W* = .58	*W* = 1.0
	r = 1.0	*r* = 16	*r* = .16	*r* = 1.0
LIBIDO.RESISTANCE	A -.15 (2)	A -.15 (2)	A -.32 (3)	A -.32 (3)
	F -.01 (1)	O -.25 (3)	M -.11 (2)	O -.10 (1)
	O -.25 (3)	F -.01 (1)	O -.10 (1)	M -.11 (2)
	M -.28 (4)	M -.28 (4)	F -.42 (4)	F -.42 (4)
	W = .90	*W* = .70	*W* = .60	*W* = .70
	r = .80	*r* = .40	*r* = .20	*r* = .40
LIBIDO.SELFDEP	A -.29 (2)	A -.29 (2)	A -.06 (2)	A -.06 (2)
	F -.46 (4)	O .16 (1)	M .15 (1)	O -.16 (3)
	O .16 (1)[44]	F -.46 (4)	O -.16 (3)	M .15 (1)
	M -.30 (3)	M -.30 (3)	F -.28 (4)	F -.28 (4)
	W = .50	*W* = .80	*W* = .90	*W* = .70
	r = 0.0	*r* = .60	*r* = .80	*r* = .40

* A, F, O, M stands for auto, father, opposite gender, and mother drawings, respectively, which is the "expected" order, from lowest to highest, for males. A, M, O, F is the expected order for females. Note that in the table the first order is the originally predicted order, and the second is the "rival" order. They are listed side by side for easy comparison. Numerals in body of table are the obtained Spearman correlations. The number in parentheses following these correlations is the rank (from 1-- lowest, to 4-- highest) of the correlation when compared to the other correlations between that variable pair. If one of the correlations is positive, this is considered the "lowest" because we are interested in negative correlations between variables. *W* is Kendall's coefficient of concordance, a measure of how the order of magnitude of the obtained correlations compared to the expected order. *r* is the Spearman correlation between the expected and the obtained order.

[44] Because we are interested in negative correlations here, a positive correlation is treated as the "smallest."

Table 14 (cont.)

WORDS.RESISTANCE	A -.05 (1) F -.27 (3) O -.23 (2) M -.61 (4) *W* = .90 *r* = .80	A -.05 (1) O -.23 (2) F -.27 (3) M -.61 (4) *W* = 1.0 *r* = 1.0	A -.46 (4) M -.35 (1) O -.43 (3) F -.36 (2) *W* = .30 *r* = -.40	A -.46 (4) O -.43 (3) M -.35 (1) F -.36 (2) *W* = .10 *r* = -.80
WORDS.SELFDEP	A -.24 (4) F -.22 (3) O -.12 (1) M -.20 (2) *W* = .10 *r* = -.80	A -.24 (4) O -.12 (1) F -.22 (3) M -.20 (2) *W* = .30 *r* = -.40	A -.11 (3) M .13 (1) O -.12 (4) F -.06 (2) *W* = .50 *r* = 0.0	A -.11 (3) O -.12 (4) M .13 (1) F -.06 (2) *W* = 20 *r* = -.60
COVERT.RESISTANCE	A -.07 (3) F -.05 (2) O .03 (1) M -.16 (4) *W* = .60 *r* = .20	A -.07 (3) O 03 (1) F -.05 (2) M -.16 (4) *W* = .70 *r* = .40	**does not qualify for females**	

For females, these correlations were all negative, but the obtained order was again slightly different than expected (mother, auto, father, opposite gender; Binomial test N = 6, x = 2; p = .34).

The correlation between EGB and CASTRATION is an alternate measure of degree of conflict on the figure drawings. Again, as expected all correlations were negative (see Table 14), and the order of magnitude was exactly as expected for males (father, opposite gender, mother).[44]

Unfortunately, an analysis of opposed processes on the free-drawings was not possible, because the only measure of threat on the free-drawings (OFSc) turned out to be invalid due to scoring criteria, as noted above.

In the imagery sessions, a number of variables were possible candidates for this analysis. Therefore, a somewhat arbitrary cut-off was set to determine which variables to use. Specifically, if three or more of the four correlations between a pair of variables of opposed processes, within each gender, were negative, the pair of variables was then examined for their relationship to the expected order.[45] Table 14 gives these results, as well as the previously discussed results for EGB.SGI and

[44] Because, on Freud's view, castration anxiety is unrelated to Oedipal arousal for females, this same analysis was not run for females.

[45] As it turned out, all but two were uniformly negative. It should be noted that the probability of getting negative correlations between two variables on all four drawings is significantly greater than what would be expected by chance. This was determined by examining each correlation matrix (one for each stimulus object) and determining the proportion of negative correlations; for males these proportions were .41, .46, .47, .48 on the auto, father, opposite gender, and mother stimulus objects respectively. By multiplying these four proportions together, we get the probability of obtaining negative correlations on a pair of variables in all four matrices; in this case, p = .04. For females, the proportions were .45, .47, .48, .46, on the auto, mother, opposite gender, and father stimulus objects respectively. Multiplied together, they result in p = .05. Interestingly, note that the proportions for males fall in the "theoretically expected order" (from smallest to largest; auto, father, opposite gender, and mother). For females, they do not.

EGB.CASTRATION. As is evident, a number of variable pairs behaved close to theoretical expectations, and 3 of them exhibited perfect agreement with either the original or the "rival" order. Therefore, it appears that the "manipulation" of sexual arousal was successful; there is compelling evidence for a theoretically derived ordering of conflict across stimulus objects.

Furthermore, the preceding preliminary analyses suggest that certain variables behaved as expected on topographic theory, while others did not. Finally, gender differences were ubiquitous, and will need to be kept in mind when examining the experimental hypotheses.

In order to draw final conclusions about which variables would offer a fair test of the experimental hypotheses (Reyher, 1993b), these empirical findings were used to evaluate the variables in the following way. As discussed above, the most meaningful criterion for assessing the variables was to examine the behavior of pairs of variables of opposed processes. Therefore, a set of rules (algorithms) was developed for examining these correlations. Due to the previously discussed problems with inter-modal correlations, only those variables which assess opposed processes within a modality/condition were examined (e.g., EGB.SGI are both within Block A-- figure drawing-- and were therefore examined).

This algorithm was as follows:

1) The four correlations (one for each stimulus object) for each pair of variables which index wish and threat, within a modality, were

examined; only those for which at least 3 of the 4 correlations were negative were accepted. All of these pairs are listed in Table 14. As is evident, this left a number of variables which index similar constructs (e.g., libido). Therefore, in order to pick which of these variables was "best", the next step of the algorithm was:

2) The magnitudes of the four correlations were examined, and compared to the theoretically expected order of magnitude, as well as the theoretically derived "rival" order. *W* was used as the measure of this concordance; the "better" candidates are those with the larger *W*. If *W* for two or more candidates were them same, the next step was:

3) Compare the correlations within a variable pair; the more viable candidate will have the larger difference in magnitude of correlations across stimulus objects. In order to assess this, Fisher's *Z* was calculated for the difference between two correlations.

A final "test" involved an examination of the auxiliary hypotheses embedded in each variable. For example, if one variable was directly derivable from topographic theory, and did not involve a great deal of auxiliary hypotheses, it was considered "better" than one which carried numerous untestable auxiliary hypotheses.

Based on this decision tree, the variables of each construct were "ranked" according to their adherence to theoretically expected patterns. For males, WORDS, based on the "rival" order, was the only variable to "pass" all tests (the Fisher's *Z* for the difference between the correlations

on the mother [-.61] and the auto [-.05] was highly significant), although EGB was close. Furthermore, WORDS could be considered superior to EGB due to its lack of auxiliary hypothesis baggage (recall that EGB involves many auxiliary hypotheses regarding the pencil being an extension of the finger, etc.). Therefore, according to the decision tree the "best" measure of libido, for males, was WORDS. The others, from "best" to "worst" were, EGB, LIBIDO, and COVERT. For females, no variables passed all tests. Based on the decision tree, the ranking of measures of libido, for females, was (from best to worst): EGB, LIBIDO, and WORDS.

For males, both CASTRATION and RESISTANCE received *W*'s of 1.0, but only RESISTANCE passed all "tests." In addition, although both of these variables are encumbered by some auxiliary hypotheses, RESISTANCE is more directly derivable from topographic theory, and CASTRATION involves the same auxiliary hypothesis baggage as EGB; therefore, RESISTANCE was considered the "best" measure. The other anxiety variables were ranked, from "best" to "worst", as follows: CASTRATION, SGI, SELFDEP. For females, again no variables passed all tests. CASTRATION, however, did receive a *W* of 1.0 using the "rival" order. The other variables, from "best" to "worst," were: CASTRATION, SGI, SELFDEP. These rankings are listed in Table 15 for quick reference during hypothesis testing.

Insert Table 15 about here

Table 15

Empirical Ranking of Dependent Variables

Males	
Measures of wish (libido)	Measures of threat (anxiety)
WORDS*	RESISTANCE
EGB	CASTRATION
LIBIDO	SGI
COVERT	SELFDEP
Females	
Measures of wish (libido)	Measures of threat (anxiety)
EGB	RESISTANCE
LIBIDO	CASTRATION
WORDS	SGI
	SELFDEP

* The variable listed first is ranked "highest"; i.e., is considered the "best" measure of the construct in question based on the aforementioned algorithm.

Examination of auxiliary hypothesis concerning "temporal displacement"

One final preliminary analysis examined the auxiliary hypothesis that the free-drawings and imagery would in fact mediate displacement of conflict-inducing fantasies generated by the figure drawings. As with the manipulation check, if this was the case we should find some significant

differences in degree of libidinal excitation and derivative formation induced by drawing the different stimulus objects. Evidence for this has already been noted for the imagery variables; Friedman tests revealed significant differences across objects on LIBIDO for females (see Table 13), and Table 14 revealed that measures of opposed processes in the imagery sessions typically varied across objects in a theoretically consistent manner, suggesting that there was some influence of the stimulus object on the imagery data.

Furthermore, Table 16 demonstrates that PHALLIC IMAGERY differed significantly across stimulus objects for both genders, with both genders exhibiting the most phallic imagery while doing imagery to the automobile drawing.

Insert Table 16 about here

Finally, as revealed in Table 17 COVERT differed significantly across objects for females, and further analysis revealed that females exhibited more blatant libidinal content while doing imagery to the father drawing compared to the opposite gender drawing $\chi r^2 (1, 16) = 6.25, p = .01$.

Insert Table 17 about here

Table 16

Friedman Test for PHALLIC IMAGERY

Males		Females	
Variable	Rank sum	Variable	Rank sum
PHAL. IM.1	49.00	PHAL. IM.1	54.000
PHAL. IM.2	76.00	PHAL. IM.2	57.500
PHAL. IM.3	48.00	PHAL. IM.3	57.000
PHAL. IM.4	86.50	PHAL. IM.4	91.500
$\chi r^2(3, 26) = 26.30, p = .00$		$\chi r^2(3, 26) = 21.77, p = .00$	

Table 17

Friedman Test for females on COVERT

Variable	Rank sum
COVERT1	25.500
COVERT2	8.500
COVERT3	25.000
COVERT4	21.000
$\chi r^2(3, 8) =$	$14.137, p = .00$

Regarding the free-drawing variables, Friedman tests on EGBFREE across all stimulus objects were insignificant for both males and females $\chi r^2(3, 27) = 0.37$, $p = .95$; $\chi r^2(3, 28) = 6.46$, $p = .09$, respectively. In setting out to examine the derivative variables (ARS and OFS), it became apparent that each derivative variable, indexing such a specific part of the supposed unconscious fantasy, does not allow for a fair test. This is because, according to Freud, the unconscious fantasy contains both the aim and the object of the wish. In other words, phallic derivatives alone are only part of the fantasy; vaginal derivatives are also involved. Therefore, the variables ARS and OFS (both phallic and vaginal) were combined to form an overall derivative variable, called DERIVATIVES. Friedman tests on this new variable across all stimulus objects were also insignificant for both males and females $\chi r^2(3, 27) = 4.03$, $p = .26$; $\chi r^2(3, 27) = 1.62$, $p = .66$, respectively. Interestingly, however, examination of the means of DERIVATIVES found that they fell in the "expected order," as shown in Table 18 (median data was not used here because it did not offer enough range to examine differences).

Insert Table 18 about here

Table 18

Means for DERIVATIVE and EGBFREE

	mother	father	opposite gender	auto
DERIVATIVES				
males	6.43	5.07	5.30	4.82
females	5.83	6.87	6.35	5.43
EGBFREE				
males	3.60	3.23	3.11	2.86
females	3.86	3.97	3.55	2.87

Furthermore, means for EGBFREE fell into the order predicted by the "rival" order. In summary, evidence for "temporal displacement" in the imagery is compelling; evidence for it on the free-drawings is lacking, however.

Conclusion

Findings from the preliminary analyses and manipulation checks suggest that fair tests of most of the experimental hypotheses are possible, with the exception of predictions concerning the free-drawings, which are suspect (although DERIVATIVES and EGBFREE demonstrated some theoretically consistent behavior, and will be used to test hypotheses regarding the free-drawings). Furthermore, the preliminary analyses revealed that certain variables stand out as more valid for the current purposes than others. As shown in Table 15, the variables EGB, SGI, LIBIDO, RESISTANCE, WORDS, SELFDEP, CASTRATION, and

COVERT are deemed capable of offering fair tests of the experimental hypotheses (although SELFDEP is somewhat limited because there is not a separate SELFDEP score for each stimulus object). Furthermore, certain variables proved to be unequivocally unviable; these were OFSc, CASTRATION IMAGERY, and REMOTE IMAGERY.

Finally, although many of the foregoing contrasts were consistent with theory, most were not formulated as hypotheses beforehand, and therefore did not "stick their neck out" and risk discorroboration, as do true experimental hypotheses. Nevertheless, a theory is better off if such exploratory procedures result in findings consistent rather than inconsistent with the theory being tested, and, because most of the aforementioned contrasts were consistent with theoretical expectations, important core commitments of topographic theory have received corroboration without even examining the experimental hypotheses.

Examination of experimental hypotheses

As discussed above, the preceding preliminary analyses suggest that certain variables behaved as expected on topographic theory, while others did not. Therefore, if a certain prediction involved a variable which did not demonstrate theoretically consistent behavior, or could not be justified on theoretical grounds, the prediction was instead tested with whatever variables gave evidence of being more relevant to the construct in question. Recall that based on the results of the analysis in Table 14, the

variables were "ranked" according to their ability to offer a fair test (see Table 15). The variable ranked highest was therefore used as the "primary" test of the prediction; if more than one variable was applicable, the lower ranked variables were used for "secondary" tests of the prediction.

Core commitments I (Anxiety and remoteness)

Hypothesis 1: As Oedipal (incestual) wishes intensify wish derivatives are generated. This leads the ego to anticipate punishment, which is experienced as anxiety. Furthermore, this leads to repression, and the transformation of affect into anxiety. This was tested with the following prediction:

> For males and females, the four stimulus objects will generate anxiety inversely proportional to the remoteness of the Oedipal object. In other words, anxiety is expected to be highest on the Oedipal object (opposite-gender parent drawing), next on the person of the opposite gender drawing, next on the same-gender parent drawing, and lowest on the automobile (i.e., will be aligned with the "expected order of conflict").

As shown in Table 15, for both males and females the variable which offered the best test of this hypothesis was RESISTANCE; this was therefore used as the primary measures. Secondary analyses were conducted with SGI and CASTRATION (SELFDEP can not be used because it did not receive a score for all four stimulus objects). As noted

above, however, due to the "stimulus pull" of the different stimulus objects comparison of SGI and CASTRATION across objects is suspect; the only unconfounded comparison is on objects of the same gender. Therefore, secondary analyses will only compare the opposite gender and opposite-gender parent stimulus object.

The prediction was therefore that RESISTANCE will be highest on the opposite-gender parent drawing, next on the opposite gender drawing, next on the same-gender parent drawing, and lowest on the auto drawing. As shown in Table 19, this was found to be the case for males.

Insert Table 19 about here

Table 19

Descriptive Statistics and Binomial Test for RESISTANCE for Males

Drawing	Median	Mean
Mother	.015	.023
Opp. Gender	.014	.020
Father	.011	.016
Auto	.011	.016

Binomial test $N = 6$, $x = 0$; $p = .02$

The secondary analysis prediction was that the Friedman test would reveal greater SGI and CASTRATION on the mother compared to the opposite gender drawing. The Friedman test for SGI ($\chi r^2(1, 30) = 1.63$, $p = .20$), and CASTRATION ($\chi r^2(1, 30) = .13$, $p = .72$) were both insignificant, although the medians were in the expected order. However, because the primary test was significant, hypothesis 1 was corroborated for males.

For females, the results of the primary analysis was not significant (see Table 20). Because on Freud's view castration anxiety is unrelated to Oedipal wishes, only SGI was used for the secondary analysis. The Friedman test for SGI was also not significant ($\chi r^2(1, 30) = .133$, $p = .72$). Therefore, for females hypothesis 1 was not corroborated.

Insert Table 20 about here

Table 20

Descriptive Statistics and Binomial Test for RESISTANCE for Females

Drawing	Median	Mean
Father	.017	.022
Opp. Gender	.017	.023
Mother	.020	.020
Auto	.012	.019

Binomial test N = 6, x = 3; $p = .66$.

Hypothesis 2: Wish derivatives that are sufficiently remote will escape detection by the censorship and therefore generate no anxiety or resistance.

This was tested with the following prediction:

> Derivatives which are more remote will generate less resistance. Furthermore, the magnitude of these correlations are expected to be aligned with the "expected order of conflict." This is expected for both males and females.

As shown in Table 15, the only fair test of this hypothesis, and only for males, was with the variables COVERT and RESISTANCE (females did not exhibit negative correlations on 3 of the four drawings for these two variables; therefore these were not considered applicable for females). Although the dubious nature of the variable REMOTE IMAGERY has been noted above, as a secondary analysis it was used here, so that females could also be tested on this prediction.

The Spearman correlations for COVERT and RESISTANCE for males were as follows, from smallest to largest: opposite gender drawing (.03), father drawing (-.05), auto drawing (-.07),and mother drawing (-.16). Although three out of four were negative, none were significant. Furthermore, the obtained order of magnitude of correlations was not as expected (Binomial test; N = 6, x = 3; p = .66). Therefore, hypothesis 2 was not corroborated for males.

As shown in Table 21, using REMOTE IMAGERY and RESISTANCE the negative correlations were significant for females on

the father drawing and males on the auto drawing. Furthermore, this correlation was negative on all stimulus objects for females, which is significantly greater than what would be expected by chance (p = .05; see footnote #46). Finally, the order of magnitude of these correlations was exactly as expected based on the "rival" order (Binomial test; N = 6, x = 0; p = .02). This was not the case for males, however (Binomial test; N = 6, x = 3. p = .66). Therefore, using REMOTE IMAGERY and RESISTANCE data, hypothesis 2 was corroborated for females, but not for males.

Insert Table 21 about here

Table 21

Correlations Between REMOTE IMAGERY and RESISTANCE

		Males
Drawing	N	Spearman r
Mother	20	-.21
Opp. Gender	24	.17
Father	24	.08
Auto	18	-.40*
		Females
Drawing	N	Spearman r
Father	18	-.62**
Opp. Gender	22	-.22
Mother	20	-.22
Auto	14	-.12

* $p < .05$ ** $p < .01$, Spearman r statistic

Hypothesis 3: Wish derivatives that are sufficiently remote will escape detection by the censorship and therefore allow for partial libidinal gratification.

In thinking about the best way to evaluate this hypothesis, it became apparent that WORDS would offer an excellent test, because, according to Freud (1908b/1949), words (and thinking in general) are remote conduits for disguised wish fulfillment. Therefore, according to Table 15, the only variables which offer a fair test, for both genders, were WORDS and LIBIDO. This hypothesis was tested with the following prediction:

> Derivatives which are sufficiently remote (WORDS) will exhibit greater evidence for some libidinal interest (LIBIDO). Furthermore, the magnitude of this positive correlation is expected to align itself with the "expected order of conflict." This is expected for both males and females.

As shown in Table 22, for males and females this correlation was significant only on the opposite gender parent stimulus object. Furthermore, the expected order was not found. Therefore, hypothesis 3 was not corroborated for either males or females.

Insert Table 22 about here

Table 22

Correlations Between WORDS and LIBIDO

		Males
Drawing	N	Spearman r
Mother	20	.40*
Opp. Gender	24	-.19
Father	24	.10
Auto	18	.27

Binomial test; N = 6, x = 3, p = .66

		Females
Drawing	N	Spearman r
Father	18	.59**
Opp. Gender	22	.01
Mother	20	.07
Auto	14	.23

Binomial test; N = 6, x = 3, p = .66

* $p < .05$ ** $p < .01$, Spearman r statistic

Hypothesis 4: Castration anxiety, being one of the primary sources of anxiety, will be highly correlated with all other manifestations of intrapsychic anxiety.

As noted in the preliminary analyses, the only viable measure of castration anxiety is CASTRATION. The only variable which offers a fair test is SGI, because it is the only other anxiety variable obtained in the same modality as CASTRATION (recall the problems associated with cross-modal correlations). Therefore, prediction 4a was as follows:

> a) For males, evidence for castration anxiety (CASTRATION) will be substantially positively

> correlated with other manifestations of intrapsychic anxiety (SGI). Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

As shown in Table 23, this prediction was borne out when males were drawing the mother, but not on the other drawings, although all correlations were positive. Furthermore, the predicted order of magnitude was found, but, due to the low number of comparisons, could not be evaluated statistically.

Insert Table 23 about here

Table 23

Correlations and Binomial Test for SGI and CASTRATION for Males

Drawing	N	Spearman r
Mother	30	.35*
Father	30	.06
Opp. Gender	30	.25

* $p < .05$ ** $p < .01$, Spearman r statistic

Binomial test N = 3, x = 0; $p = .13$

Prediction 4b was as follows:

> b) For females, evidence for castration anxiety (CASTRATION) will be substantially positively correlated with other manifestation of intrapsychic

anxiety (SGI).

As shown in Table 24, this prediction was also borne out.

Insert Table 24 about here

Table 24

Correlations Between SGI and CASTRATION for Females

Drawing	N	Spearman r
Mother	28	.42*
Father	27	.60**
Opp. Gender	28	.59**

* $p < .05$ ** $p < .01$, Spearman r statistic

Therefore, hypothesis 4 was corroborated. These findings need to be qualified, however, due to the aforementioned similarity in scoring criteria between CASTRATION and SGI, which might lead to a positive correlation regardless of one's theoretical prediction. However, for males the expected order of magnitude was found, lending some credence to this finding.

Core commitments II (Displacement)

Hypothesis 5: At some level of libidinal intensity the ego institutes

repression. Accordingly, the libido that is decathected (detached) from the wish is transformed into anxiety (hypothesis #1), and becomes mobile and displaceable. Therefore, for males there will be evidence of libidinal displacement onto either non-sexual body parts, or onto subsequent drawings, when Oedipal wishes are intensified.

The only variables which offer potentially fair tests of derivative formation and displacement of libido are DERIVATIVES and EGBFREE. Therefore, prediction 5a was as follows:

> a) For males, evidence for derivative formation (DERIVATIVES) will be highest following the mother drawing, next on the opposite gender drawing, next on the father drawing, and lowest on the automobile (i.e., aligned with the "expected order of conflict").

As shown in table 25, prediction 5a was borne out.

Insert Table 25 about here

Table 25

Descriptive Statistics and Binomial Test for DERIVATIVES for Males

Drawing	Median	Mean
Mother	6.0	6.4
Father	5.5	5.1
Opp. Gender	6.0	5.3
Auto	4.5	4.8

Binomial test N = 6, x = 0; $p = .02$.

Prediction 5b was as follows:

> b) For males, evidence for displaced libido (EGBFREE scores) will be aligned with the "expected order of conflict."

As shown in Table 26, prediction 5b was not borne out. When using the "rival" ordering of objects, however, it was (Binomial test N = 6, x = 0; p = .016).

Insert Table 26 about here

Table 26

Descriptive Statistics and Binomial Test for EGBFREE for Males

Drawing	Median	Mean
Mother	3.0	3.6
Father	3.0	3.2
Opp. Gender	2.0	3.1
Auto	3.0	2.9

Binomial test N = 6, x = 1; p = .109

Prediction 5c was as follows:

> c) For males, anxiety will be negatively correlated with libido. Furthermore, the magnitude of these correlations will aligned with the "expected order of conflict."

According to Table 15, there are many variables which offer a fair test of this prediction. WORDS.RESISTANCE, however, are best, and will therefore be used for the primary analysis.

As shown in Table 27, while all of the correlations were negative, as expected ($p = .04$), none of the Binomial tests were significant (although the order for EGB.CASTRATION was exactly as expected). Furthermore, when using the "rival" order, the Binomial test was significant for WORDS.RESISTANCE. Therefore, prediction 5c was borne out with EGB.CASTRATION (insofar as the data would allow), and with WORDS.RESISTANCE when using the "rival" order.

Insert Table 27 about here

Prediction 5d was as follows:

> d) For males, anxiety on the figure drawings will be positively correlated with measures of derivatives on the free-drawings. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

Because this hypothesis is specifically about anxiety on the figure drawing leading to displacement onto the free-drawing, the only variables which offer a fair test for anxiety are SGI and CASTRATION, and for wish, DERIVATIVES. Because CASTRATION does not allow for tests of

Table 27

Correlations between Measures of Libido and Anxiety for Males

WORDS.RESISTANCE	EGB.SGI
A -.05	A -.33*
F -.27	F -.28
O -.23	O -.34
M -.61**	M -.57**
Binom. test N = 6, x = 1; p = .11	Binom. test N = 6, x = 1; p = .11

LIBIDO.RESISTANCE	EGB.CASTRATION
A -.15	A n/a
F -.01	F -.01
O -.25	O -.14
M -.28	M -.34*
Binom. test N = 6, x = 1; p = .11	Binom. test N = 3, x = 0; p = .13

* $p < .05$ ** $p < .01$, Spearman r statistic

Table 28

Correlation between SGI.DERIVATIVES and CASTRATION.DERIVATIVES for Males

SGI.DERIVATIVES	CASTRATION.DERIVATIVES
A .05	A n/a
F -.02	F -.50**
O -.03	O -.28
M -.11	M -.05
Binom. test N = 6, x = 6; p = 1.0	Binom. test N = 3, x = 0; p = .13

* $p < .05$ ** $p < .01$, Spearman r statistic

significance using the Binomial test (because there is only an N of 3), SGI was used for the primary analysis.

As shown in Table 28, prediction 5d was not borne out with the SGI.DERIVATIVES data. Furthermore, this prediction was not borne out with the CASTRATION.DERIVATIVES data, but the magnitude of correlations were in the expected order.

Insert Table 28 about here

Prediction 5e was as follows:

> e) For males, libido on the figure drawings will be negatively correlated with measures of derivatives on the free-drawing. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

The only variables which offer a fair test of this prediction were EGB and DERIVATIVES, for the same reasons discussed in prediction 5d. The correlations between EGB and DERIVATIVES were as follows: auto (.04), father, (-.03), opposite gender (-.06), and mother (-.11). Although none were significant, they do match the "expected order" (Binomial test; N = 6, x = 0, p = .02). Therefore, prediction 5e was "borne out"

(although only 3 of the 4 correlations were negative).[47]

In summary, hypothesis 5 was "corroborated" (4 of the 5 predictions were supported).

Hypothesis 6: For females, drawing the father is expected to bring about censorship (Hypothesis #1), leading to a withdrawal of cathexis which will then be displaced onto either non-sexual areas of the figure drawing or onto the subsequent drawing.

Originally, a "rival" hypothesis was set up to compare whether female libido typically involved phallic or vaginal derivatives. For reasons discussed above, however, this comparison is untenable because unconscious fantasies, on topographic theory, contain both the aim and the object of that aim, and should therefore contain both phallic and vaginal derivatives. Therefore, hypothesis 6 was tested with the variable DERIVATIVES. Prediction 6a was therefore:

> a) For females, evidence for derivative formation will be highest on the father drawing, next on the male drawing, next on the mother drawing, and lowest on the auto (i.e., aligned with the "expected order of conflict").

As is evident from Table 29, prediction 6a was borne out.

[47] The reason for putting the words "borne out" in parentheses is that the prediction did not "pass" both tests, although it was very close. Recall that a relatively high empirical hurdle has been set up; the correlation between the variable pair must be negative on all four stimulus objects, and the magnitude of the correlations must be aligned with the "expected order of conflict." Therefore, in this example 3 of the 4 correlations are negative, and the "expected order" was found, suggesting that it was very close to being successful; putting "borne out" in quotations therefore highlights that one of the two empirical hurdles was surmounted, and the other was almost surmounted.

Insert Table 29 about here

Table 29

Descriptive Statistics and Binomial Test for DERIVATIVES for Females

Drawing	Median	Mean
Father	6.0	6.9
Opp. Gender	6.0	6.3
Mother	6.0	5.8
Auto	5.5	5.4

Binomial test N = 6, x = 0; p = .02.

Prediction 6b was as follows:

> b) For females, evidence for displaced libido (EGBFREE scores) will be aligned with the "expected order of conflict."

As Table 30 reveals, prediction 6d was not corroborated. However, as with the males on this prediction (see Table 26), a Binomial test on the "rival" order does come out significant (N = 6, x = 0; p = .02).

Insert Table 30 about here

Table 30

Descriptive Statistics and Binomial Test for EGBFREE for Females

Drawing	Median	Mean
Father	3.5	3.967
Opp. Gender	3	3.552
Mother	4	3.862
Auto	2	2.867

Binomial test N = 6, x = 1; p = .11.

Prediction 6c was as follows:

> c) For females, anxiety will be negatively correlated with libido. Furthermore, the magnitude of these correlations will be aligned with the "expected order of conflict."

According to Table 15, there are many variables which offer a fair test of this prediction. LIBIDO.SELFDEP, however, are best, and will therefore be used for the primary analysis.

As shown in Table 31, while all but one of the correlations were negative, as expected (p = .05 when all four correlations are negative), none of the Binomial tests were significant. Therefore, prediction 6c was not borne out.

Insert Table 31 about here

Table 31

Correlation between Measures of Libido and Anxiety for Females

SELFDEP.LIBIDO	EGB.CASTRATION
A -.06	A n/a
M .15	M -.26
O -.16	O -.18
F -.28	F -.35*
Binom. test N = 6, x = 1; p = .11	Binom. test N = 6, x = 1; p = .25

EGB.SGI	LIBIDO.RESISTANCE
A -.33*	A -.32
M -.28	M -.10
O -.49**	O -.10
F -.34*	F -.42*
Binom. test N = 6, x = 2; p = .34	Binom. test N = 6, x = 3; p = .66

WORDS.RESISTANCE
A -.46*
M -.35*
O -.43*
F -.36*
Binom. test N = 6, x = 3; p = .66

* $p < .05$ ** $p < .01$, Spearman r statistic

Prediction 6d was as follows:

> d) For females, anxiety on the figure drawings will be positively correlated with measures of derivatives on the free-drawings. Furthermore, the magnitude of these correlations will aligned with the "expected order of conflict."

Because this hypothesis is specifically about anxiety on the figure drawing

leading to displacement onto the free-drawing, the only variables which offer a fair test for anxiety are SGI and CASTRATION, and for wish, DERIVATIVES. Because CASTRATION does not allow for tests of significance using the Binomial test (because there is only an N of 3), SGI was used for the primary analysis.

As shown in Table 32, many of these correlations were negative, against expectation. Therefore, prediction 6d was not borne out.

Insert Table 32 about here

Table 32

Correlation between SGI.DERIVATIVES and CASTRATION.DERIVATIVES for Females

SGI.DERIVATIVES	CASTRATION.DERIVATIVES
A .16	A n/a
M -.28	M -.24
O -.22	O -.22
F .11	F .12
Binom. test N = 6, x = 4; p = .75	Binom. test N = 3, x = 0; p = .13

* $p < .05$ ** $p < .01$, Spearman r statistic

Prediction 6e was as follows:

> e) For females, libido on the figure drawings will be negatively correlated with measures of derivatives on the free-drawing. Furthermore, the magnitude of these

> correlations will be aligned with the "expected order of conflict."

The only variables which offer a fair test of this prediction are EGB and DERIVATIVES. The correlations between EGB and DERIVATIVES were as follows: auto (.04), mother, (.32), opposite gender (.26), and father (-.09). Because three of the four were positive, against expectations, prediction 6e was not borne out.

In summary, of the five predictions involved in hypothesis 6, only two were borne out. Therefore, hypothesis 6 was not corroborated.

Core commitments III (Castration anxiety)

Hypothesis 7: For males, Oedipal (incestual) wishes lead to a fear of punishment (castration anxiety).

The only variable which offers a fair test is CASTRATION. Therefore, the prediction was:

> For males, evidence for castration anxiety (CASTRATION scores) will be highest on the mother drawing, next on the opposite gender drawing, and lowest on the father drawing.

As shown in Table 33, the predicted order was found, although due to the low N it did not allow for a test of statistical significance. Therefore, hypothesis 7 was "corroborated" insofar as the data allowed.

Insert Table 33 about here

Table 33

Descriptive Statistics and Binomial Test for CASTRATION for Males

Drawing	Median	Mean
Mother	2.0	2.2
Opp. Gender	2.0	1.8
Father	1.5	1.7

Binomial test N = 3, x = 0; p = .13.

Hypothesis 8: Females will exhibit less castration anxiety than males.

For the same reasons described above, the only variable which offered a fair test is CASTRATION. Prediction 8a, that while drawing the mother, males would have greater castration anxiety (higher CASTRATION scores) than females, was borne out ($U(1, 30) = 285$, p = .03). Prediction 8b, that females will have less overall castration anxiety (obtained by summing the CASTRATION scores for all stimulus objects) than males, was also borne out ($U(1, 30) = 268$, p = .03). Therefore, hypothesis 8 was corroborated.

Hypothesis 9: Due to the castration complex, females will exhibit more feelings of worthlessness than males.

The prediction which followed from this, that females would exhibit more feelings of worthlessness (higher SELFDEP scores) than males, was not borne out ($U(1, 26) = 325$, $p = .70$). Therefore, hypothesis 9 was not corroborated.

Core commitments IV (Further gender differences)

Hypothesis 10: Males will exhibit greater libido than females, and will react to the intensification of incestual wishes with greater censorship and anxiety than females.

This hypothesis was tested by comparing the correlation between variables of libido and anxiety; it was predicted that males would exhibit larger negative correlations than females on these variables. Furthermore, because the hypothesis is specifically about incestual wishes, only the correlation on the opposite gender parent was analyzed. Based in Table 15, the variable pairs EGB.SGI, EGB.CASTRATION, WORDS.RESISTANCE, WORDS.SELFDEP, LIBIDO.RESISTANCE, and LIBIDO.SELFDEP should all offer a fair test. Because the "best" variable pair is different for males and females, they were all analyzed, and a final conclusion as to the prediction was based on the number of successes. These results can be found in Table 34.

Insert Table 34 about here

As shown in Table 34, the negative correlation was higher for males on 4 of the six variable pairs; this is not greater than what would be expected by chance, however. Furthermore, none of the correlations exhibited significant gender differences in magnitude. Therefore, hypothesis 10 was not corroborated.

Table 34

Correlations between Variables of Opposed Processes on the Opposite Gender Parent Stimulus Object

	Males		Females	
	N	r	N	r
EGB.SGI	30	-.57**	30	-.34*
EGB.CASTRATION	30	-.34*	30	-.35*
WORDS.RESISTANCE	27	-.61**	26	-.36*
WORDS.SELFDEP	27	-.20	26	-.06
LIBIDO.RESISTANCE	27	-.28	26	-.42*
LIBIDO.SELFDEP	27	-.30	26	-.28

* $p < .05$ ** $p < .01$, Spearman r statistic

Hypothesis 11: Males will exhibit more displacement than females. The only variables which could be used to test this hypothesis were DERIVATIVES and EGBFREE. Because we are not comparing variables

directly from the figure drawings (both DERIVATIVES and EGBFREE are from the free-drawings), the problems of stimulus pull were minimized because the subject was allowed to draw whatever he/she wanted to. Therefore, comparison across objects is not compromised. Although both DERIVATIVES and EGBFREE demonstrated some theoretically consistent behavior, DERIVATIVES was used for the primary analysis because it is not weighted down with as much auxiliary hypothesis baggage as is EGBFREE (recall that EGBFREE involves auxiliary hypotheses about the pencil being an extension of the finger, etc.; DERIVATIVES is more directly derivable from topographic theory). Finally, as this displacement was theoretically expected to be due to anxiety aroused by incestual wishes, this comparison was only made on the opposite gender parent drawing. The prediction was therefore:

> Males will exhibit a higher DERIVATIVES (or EGBFREE) score on the opposite gender parent drawing than females.

The Mann-Whitney *U* test was insignificant for both DERIVATIVES and EGBFREE ($U(1, 60) = 494.5$, $p = .51$); ($U(1, 60) = 483.0$, $p = .62$), respectively. Therefore, hypothesis 11 was not corroborated.

Hypothesis 12: Males will exhibit more significant differences in graphic indicators of anxiety and libido across stimulus objects than females.

In order to test this, Friedman tests were conducted on all variables

of libido and defense listed for both genders in Table 15. Recall that SELFDEP did not receive a score for each stimulus object; therefore, it could not be used in this analysis. Significant Friedman results demonstrate significant variability in scores across objects. These results can be found in Table 35.

Insert Table 35 about here

Table 35

Friedman Tests for Variables of Libido and Anxiety

	Males			Females		
Libido variables	N	χr^2	p value	N	χr^2	p value
EGB	30	5.27	.15	30	6.43	.09
LIBIDO	26	6.27	.10	26	11.29	.01
WORDS	26	3.51	.32	26	10.06	.02
Anxiety variables						
SGI	30	3.63	.30	30	5.57	.14
RESISTANCE	26	4.81	.19	26	4.65	.20
CASTRATION	30	2.62	.27	30	0.52	.77

As is evident from Table 35, hypothesis 12 was not corroborated. In fact, against expectation females exhibited significant Friedman test statistics on 2 of the variables, while males were not significant on any. Furthermore, of the seven tests conducted, females obtained a larger Friedman test

statistic on six of them. Therefore, hypothesis 12 was not corroborated

Hypothesis 13: Males will generate more phallic derivatives than females.

To better address the complexity of phallic derivatives, the variables OFSp and ARSm were combined for this analysis, creating a new variable labeled PHALLIC DERIVATIVES. Furthermore, because due to the "inverted" Oedipus complex it might be assumed that drawing the father would bring about more "vaginal" derivatives in males, this hypothesis was only tested with data associated with the female, mother, and auto stimulus objects. In order to get an overall score, these three scores were summed. Therefore, prediction 13a was as follows:

> a) Males will exhibit higher levels of phallic derivatives following drawing female bodies and the auto (sumPHALLIC DERIVATIVES) than females.

The Mann-Whitney U test was not significant ($U(1, 55) = 407.5$, $p = .62$); therefore prediction 13a was not borne out.

Prediction 13b was as follows:

> b) Males will exhibit higher levels of phallic displacement on the automobile drawings (the AUTO score) than females.

The Mann-Whitney U test was significant ($U(1, 60) = 185.5$, $p = .000$); therefore prediction 13b was successful.

Therefore, hypothesis 13 was "corroborated" only with the secondary analysis.

Hypothesis 14: Females will generate more vaginal derivatives than males.

To better address the complexity of vaginal derivatives, the variables OFSe and ARSf were combined for this analysis, creating a new variable labeled VAGINAL DERIVATIVES. Furthermore, due to the possibility that when drawing the mother females might exhibit more phallic derivatives due to the "inverted" Oedipus complex, VAGINAL DERIVATIVES was the sum of ARSf and OFSe on the father, opposite gender, and auto stimulus objects only. Therefore, the prediction was:

> Females will exhibit higher levels of vaginal derivatives following drawing male bodies and the auto (sumVAGINAL DERIVATIVES) than males.

The Mann-Whitney U test proved significant ($U(1, 56) = 509$, $p = .05$). Furthermore, this difference proved even more robust when only examining derivatives following the father drawing ($U(1, 60) = 630.5$, $p = .01$). Therefore, hypothesis 14 was corroborated.

Additional analyses

The following analyses were not formulated as hypotheses beforehand, and therefore did not risk discorroboration, as do true experimental hypotheses. However, as exploratory procedures, the following analyses were undertaken.

As noted in Table 15, the variable WORDS proved to be one of the better measures of libido. While this may seem strange at first, it makes

perfect sense when one is aware of Freud's views on thinking. Specifically, according to Freud words are derivatives which have escaped the censorship, and therefore should allow for some libidinal gratification. This is, in fact, the underlying reason why free-association is the cornerstone of psychoanalytic treatment; as the analysand free associates, the analyst becomes aware of the latent content behind the derivatives (the words), and interprets this content to the analysand.

If, as has been suggested empirically, WORDS indexes libidinal activation that is "acceptable" (i.e., has escaped the censorship), then we would expect it to be highest on the Oedipal object and lowest on the automobile. Therefore, the number of words should follow our "expected order." Table 36 shows the descriptive statistics and Binomial test for WORDS across stimulus objects, for both genders.

Insert Table 36 about here

Table 36

Descriptive Statistics and Binomial Test for WORDS

	Males	
Drawing	Median	Mean
Mother	421 (4)*	513
Opp. Gender	367 (2)	429
Father	408 (3)	485
Auto	331 (1)	402

Binomial test $N = 6, x = 1; p = .12$

	Females	
Drawing	Median	Mean
Father	373 (4)	450
Opp. Gender	296 (1)	403
Mother	340 (3)	451
Auto	300 (2)	358

Binomial test $N = 6, x = 2; p = .34$

* The number in parentheses is the rank of the median from lowest (1) to highest (2).

As shown in the preceding table, the Binomial test was insignificant for both genders. Using the "rival" order, however, the Binomial test was significant for males, but not for females.

Furthermore, a Friedman test comparing WORDS across all objects was significant (χr^2 (1, 26) = 10.06, p = .02) for females, but not for males (χr^2 (1, 26) = 3.51, p = .32). Further analysis revealed that for females there were significantly more WORDS on the father compared to the opposite gender drawing χr^2 (1, 26) = 5.54, p = .02, and on the father compared to the auto drawing χr^2 (1, 26) = 9.85, p = .002, as expected.

Therefore, WORDS did appear to be an index of libidinal activation.

Another post hoc analysis involved the variable SIZE. As mentioned previously, SIZE has been involved in conflicting results, and significant gender differences, in previous studies. Therefore, an exploratory analysis of this variable was undertaken here, in an attempt to shed some light on what it actually indexes.

As with previous research, SIZE demonstrated significant gender differences. As shown in Table 6, for females it was positively (and significantly) correlated with other measures of anxiety (SGI and CASTRATION) on all human figure drawings. For males it was also positively correlated with SGI on all human figure drawings (although it was negatively correlated with CASTRATION), but it was also always positively correlated with EGB. Furthermore, for females SIZE was positively correlated with SELFDEP on all stimulus objects; this correlation was always negative for males. This would seem to demonstrate that for females, drawing a larger figure is associated with anxiety and feelings of worthlessness, which was not the case for males.

Previous research led Reyher (1985) to advance the hypothesis that SIZE decreases under acute threat, but increases as threat decreases; i.e., as threat increases we "hunker down," but as threat decreases SIZE increases as a means of intimidating the source of threat. This hypothesis was tested with the present data, using the "expected order of conflict"; i.e., for both genders the opposite gender parent should lead to the most

"threat" (and therefore smaller SIZE), while the same-gender parent should lead to the least threat (and therefore larger SIZE).[48] Table 37 shows these comparisons.

Insert Table 37 about here

Table 37

Friedman tests for SIZE on the Human Figure Drawings

Males		Females	
Variable	Rank sum	Variable	Rank sum
SIZE (mother)	54.00	SIZE (mother)	61.00
SIZE (opp. gender)	62.50	SIZE (opp. gender)	54.50
SIZE (father)	63.50	SIZE (father)	58.50
χr^2 (2,30) = 1.82, p = .40		χr^2 (2, 30) = .741, p = .69	

As is evident in Table 37, neither Friedman test was significant. Note, however, that the rank sum was in the "expected" order for males.

A third post hoc analysis was based on the success of hypothesis 5 (which dealt with displacement). Because it worked out so well, it seemed prudent to examine the same hypothesis using the imagery data. This was not done originally because, taking place a week after the original figure

[48] The auto will not be compared here, due to the conceptual stretch involved in comparing the size of the auto with the size of human figures.

drawings were completed, it was believed that the imagery would not be as effective a repository for "temporal" displacement as the free-drawings. Furthermore, the problems associated with cross-modal comparisons have already been addressed. However, as an exploratory procedure, it was examined here. These analyses were only undertaken for males, because theoretically these dynamics are not as relevant for females, and because of the lack of success of hypothesis 6.

To reiterate, if the figure drawing (touching the body) leads to threat, and therefore prohibition, there should be more evidence for displaced libido in the imagery, and it should aligned with our expected order. Because of problems with "stimulus pull," comparing PHALLIC IMAGERY across objects is suspect, and was therefore not used here. The only imagery variable which offers a fair test is LIBIDO. As evident in Table 38, the expected order was found.

Insert Table 38 about here

Table 38

Descriptive Statistics and Binomial Test for LIBIDO for Males

Drawing	Median
Mother	.013
Opp. Gender	.009
Father	.007
Auto	.005

Binomial test $N = 6$, $x = 0$; $p = .02$.

Furthermore, if prohibition leads to the damming up of libido, which then seeks other outlets (such as displacement), then anxiety on the figure drawing (SGI and/or CASTRATION) should be positively correlated with displaced libido onto the imagery (LIBIDO). By this same token, if libido is evident on the figure drawing (EGB), (i.e., has escaped the censorship), then there should be less evidence for it on the imagery (LIBIDO), as well as less resistance (RESISTANCE) and anxiety (CASTRATION IMAGERY[49]). Finally, all of these correlations should be aligned with the "expected order of conflict." These results can be found in Table 39.

Insert Table 39 about here

As Table 39 shows, the results were not as cohesive as in hypothesis 5, which is to be expected. However, all of the correlations between SGI and

[49] For the present purposes CASTRATION IMAGERY was used, although, for reasons discussed previously, its validity is questionable.

Table 39

Correlations Between Measures of Anxiety and Displaced Libido for Males

SGI.LIBIDO			CASTRATION.LIBIDO		
A	.17	(3)[a]	A	n/a	
F	.09	(2)	F	.28	(3)
O	.05	(1)	O	-.12	(1)
M	.36*	(4)	M	.19	(2)

Binom. test N = 6, x = 3; $p = .66$ Binom. test N = 3, x = 2; $p = .75$

EGB.LIBIDO			EGB.RESISTANCE		
A	.35*	(1)	A	-.07	(3)
F	-.25	(4)	F	-.01	(2)
O	.27	(2)	O	-.17	(4)
M	-.03	(3)	M	.14	(1)

Binom. test N = 6, x = 2; $p = .34$ Binom. test N = 6, x = 4; $p = .75$

EGB.CASTRATION IMAGERY		
A	-.05	(1)
F	-.06	(2)
O	-.17	(3)
M	-.35*	(4)

Binom. test N = 6, x = 0; $p = .02$

* $p < .05$ ** $p < .01$, Spearman r statistic

[a] The number in parentheses is the rank of the correlation from lowest (1) to highest (2). Recall that if the predicted direction of correlation is negative, a positive correlation is ranked lowest.

LIBIDO were positive, as expected, and on the mother stimulus object this correlation was significant. Furthermore, the correlations between EGB and CASTRATION IMAGERY were all negative, and were aligned according to the "expected order of conflict." Finally, the correlation between EGB and CASTRATION IMAGERY was significant on the mother.

One final post hoc analysis involved the relationship between castration anxiety evidenced on the figure drawing and derivative formation on the free-drawings. Recall that prediction 5d expected these correlations to be positive; for males, however, evidence for castration anxiety of the figure drawings (CASTRATION) was negatively related with derivative formation (DERIVATIVES) on all three stimulus objects (see Table 40).

Insert Table 40 about here

Table 40

Correlations Between Castration Anxiety and Derivatives for Males

	Mother	Opp. Gender	Father
CASTRATION.PHALLIC DERIVATIVES	-.04	-.16	-.49**
CASTRATION.VAGINAL DERIVATIVES	-.24	-.25	-.32*

* $p < .05$ ** $p < .01$, Spearman r statistic

This was true for both phallic and vaginal derivatives. Perhaps, then, an increase in castration anxiety leads to a disorganization of executive and synthetic functions of the ego. Hence, derivative formation cannot take place; derivatives, being compromise formations, require an ego that is capable of synthesizing activity. Also, it is noteworthy that for both vaginal and phallic derivatives the largest negative correlations are on the father stimulus object; recall that Freud believed that in the male's fantasy it was typically father who was seen as the potential castrator.

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GENERAL DISCUSSION

Data from a number of sources throughout this investigation lend impressive support to Freud's topographic and Oedipal theory. Furthermore, examining correlations between variables of opposed processes (repressive vs. anti-repressive forces) proved to be a valuable heuristic for data analysis and exploration. Recall that the belief that negative correlations represent opposed processes (Tobias, 1993) was the core construct used for exploring the correlation matrices and testing the experimental hypotheses.

Perhaps the most powerful finding from this investigation involves the ability of the "expected order of conflict" to organize the data. I hypothesized that the four stimulus objects (auto, opposite gender, parents) would generate different degrees of censorship and conflict due to their remoteness or closeness to the Oedipal object. The "expected order of conflict" was based on the following reasoning: I expected that for males, drawing the mother would be especially conflict-inducing due to the threat of castration for Oedipal (incestual) wishes. The opposite gender drawing should generate less conflict than the Oedipal object, but, because it can be a "stand-in" for the Oedipal object, should still be conflict-inducing. The same-gender parent drawing, being even more remote from the Oedipal object, should generate less, and finally, the automobile, because it does not involve "touching" a human body, should be the least conflict-inducing.

Results from this investigation offer impressive corroboration for this ranking of stimulus objects for males: it was apparent for single variables of "threat" (RESISTANCE, CASTRATION), single variables of derivative formation (DERIVATIVES), and pairs of variables of opposed processes (repressive and anti-repressive forces-- EGB.CASTRATION, CASTRATION.DERIVATIVES). It even ordered the proportion of negative correlations in the overall matrix of correlations for each stimulus object.

In fact, of the 10 tests to which it was submitted for males (not including post-hoc tests), it succeeded in 6 of them. The odds of getting six successes out of ten attempts, when each test is at the .02 level, is p = 1.23966E-8, which is clearly, according to Weimer's (1979) "inter-ocular traumatic test," highly significant. Furthermore, of these 4 failures, two of them were aligned with the "rival" order, which, of course, is close to the expected original order (auto is still lowest, and mother is still highest).[50] This finding is even more impressive when it is recalled that the expected order was being subjected to "risky" tests (Meehl, 1978) because they involved both direction of correlations and rank order predictions. Meehl (1978) notes that:

> It is always more valuable to show approximate agreement of observations with a theoretically predicted numerical point value, rank order, or function form, than it is to compute a 'precise probability' that something merely differs from something else. (p. 825)

[50] The "rival" order was only successful on 2 of the 10 tests to which it was submitted, demonstrating the superiority of the original order for males.

Therefore, the "expected order" appears to have cleared a rather large empirical hurdle.

Other significant findings included theoretically consistent gender differences in castration anxiety, and evidence that for males castration anxiety is increased when Oedipal (incestual) wishes are intensified. As noted in Appendix A, one of the problems with most of the previous investigations of castration anxiety is that they did not involve a manipulation (or even mention of) sexual arousal. Because, on Freud's view, castration anxiety is specifically related to sexual (especially incestual) arousal, a fair test is only offered if arousal is manipulated. In this investigation, according the the core commitments, this was accomplished by having the participants "touch" different bodies.

Although unable to be tested in the imagery, due to restriction of range with the CASTRATION IMAGERY variable, a reading of some of the imagery sessions suggests that castration anxiety was also prevalent there. As but one example, the following participant, a male, did imagery to the mother drawing first (recall that the imagery was stimulated by "touching up" the drawing, which was expected to arouse Oedipal wishes). This was immediately followed by imagery to the father drawing, which is transcribed verbatim below:

> I draw a blank, I don't see anything.....(What are you experiencing?)...it could be lonely, an empty area with nothing there....(Any images, thoughts or feelings now?).....nothing there's just nothing there, nothing's coming, no pictures, nothing. Its just dark,

there's nothing there.....(Do you notice any feelings or thoughts or anything like that?)...seems like a, maybe secluded maybe, emptiness, loneliness.....(As you think of those words does any image come to mind or any other thoughts or sensations)...a desert, a big desert, a big desert....(And what does that look like?)...just flat, no sand dunes, nothing, just flat sand, for like miles it just continues, doesn't seem that hot though, it doesn't seem that hot at all.....bucket of water being dumped on top of the desert...(What does that look like?)...a big gray pail, someone holding it with two hands just emptied it out on top of this desert, desert seemed muddy and then its dark again...(You said the desert seemed muddy?)...muddy...(What did that look like?)...kinda looks like a giant mud pie, can see like little puddles of water on top of the sand, little puddles all over the place on top of the sand, its kinda of reflecting like a white reflection off of the water, but there's no sun. I see a cactus, a green cactus...(Can you describe that in a little more detail?)...only see one, right in the middle, just one cactus, it shrunk by the sand, water puddles are taking up most of the ground around it...(And what does the cactus look like?)...Its kinda of tall, not that tall, its maybe a little taller than I am, there's these needles coming out of it, they're not that long, pretty short actually...now it feels like it just fell down, like someone came and with a little saw or something and just cut it down...(Someone cut the cactus down?)... I don't see the saw...(You don't see the saw?)...I see a saw...(And what does that look like?)...Like one of those a, I guess a power saw or something with a chain around it, and it just, I mean I can't see any one actually cutting it, I can see the saw and I can see the tree fell, I mean the cactus, it fell. I went blank, there's nothing else...(What was the last thing you saw?)...it just like went blank, it just like shut off...

This transcript is especially interesting because it highlights the interplay between repressive and anti-repressive forces, as demonstrated in the following lines: "The desert seemed muddy, and then its dark again," "Its kind of tall, not that tall," "I don't see the saw...(You don't see the saw?)...I see a saw." Note, also, the salience of repression at the end: "I went blank,

there's nothing else...it just like shut off...."

Evidence for a theoretical relationship between anxiety, derivative formation, and displaced libido was also found for males. Recall that hypothesis 5 involved five predictions related to these dynamic relationships. Because it was somewhat complex, it will be repeated here:

> At some level of libidinal intensity the ego institutes repression. Accordingly, the libido that is decathected (detached) from the wish is transformed into anxiety; it also becomes mobile and displaceable. Therefore, for males there will be evidence of libidinal displacement onto either non-sexual body parts, or onto subsequent drawings, when Oedipal wishes are intensified.

The five predictions were attempts to address each part of this process. Therefore, the fact that four of the five were borne out is impressive. Specifically, it was found that anxiety was negatively correlated with libido on the figure drawings, but was positively correlated with displaced libido onto the free-drawings. Furthermore, libido on the figure drawing was negatively correlated with displaced libido. This is as expected because if some libidinal gratification is achieved on the figure drawing, then there is less need to form derivatives and displace it onto the free-drawings.[51] Finally, the magnitude of these correlations were aligned with the "expected order of conflict," suggesting that, as expected, these dynamics are especially prevalent when incestual wishes are aroused.

[51] This has been called the "venting effect" in previous research. For example, Gaines (1994) found less evidence for sexual derivatives in free-imagery following experimental conditions which allowed for libidinal gratification (e.g., describing a sexual experience, a meal, etc.). Furthermore, he found that the greater the evidence for libidinal gratification in the experimental condition, the larger the decrease in free-imagery libidinal gratification.

Gender differences

As expected based on topographic and Oedipal theory, the "expected order of conflict" did not hold up nearly as well for females as for males. In fact, it only succeeding in 1 of the 10 tests to which it was submitted (the "rival" did no better; 2/10). This is not surprising because, according to Freud (1925/1950, 1931/1950), females do not suffer from castration anxiety, the motive force in the dissolution of the Oedipus complex. Therefore, according to Freud, females have less motivation to give up the libidinal cathexis toward the father, and less anxiety in relation to these cathexes (as no "castration" can take place). Hence, one of the main dynamic forces responsible for derivative formation, displacement, etc., is not active for females. According to Freud (1933/1964), females are instead more motivated by loss of love, which, due to its interpersonal nature, was expected to be less prevalent in the present investigation.

Furthermore, gender specific differences in derivative formation were found; females had higher levels of vaginal derivative formation, while males exhibited greater phallic displacement on the automobile drawing than females. This finding, as well as those that follow, could be interpreted as lending evidence to the idea of "primary femininity" (e.g., Stoller, 1977). As noted in Appendix C, psychoanalytic theorists who disagreed with Freud's propositions concerning female development and sexuality proposed that women in fact do experience vaginal sensations at an early age and, due to masturbation, cathect their own genitals (e.g.,

Jones, 1933). This is in stark contrast to Freud (1925/1950, 1931/1950), who believed that women typically did not experience vaginal sensations until puberty, and in fact belittled their own genitals (specifically their clitoris) because they believed it to be "inferior" to the "larger" male penis. If Freud is correct, one might expect to find derivatives of the female genitals to be associated with anxiety, rather than libido, for females.

This, in fact, is what was found for male subjects (see Table 7). On the free-drawings, EGBFREE (which theoretically measures displaced libido) was negatively correlated with ARSf on the mother, opposite gender, and auto stimulus objects (OFSe was also negative on the mother and opposite gender drawings).[52] Recall also that EGBFREE was positively correlated with measures of phallic derivatives. Therefore, for males libido seems to be more related to phallic derivatives than vaginal derivatives, as expected.

However, for women EGBFREE was positively correlated with both ARSf and OFSe on all stimulus objects. Furthermore, the correlation between EGBFREE and ARSf and OFSe was always higher (although not significantly) than the correlation between EGBFREE and phallic derivatives (ARSm and OFSp), except on the opposite gender stimulus object. Finally, for females, the correlation between LIBIDO and PHALLIC IMAGERY (see Table 8) was negative on all stimulus objects,

[52] Interestingly, these correlations were positive on the father drawing. Although speculative, this change in correlation could be interpreted as reflecting the male's unconscious homosexual wish for the father, as part of the "inverted" Oedipus complex.

while for males it was positive on three of four objects.

All of this can be interpreted as demonstrating that, for both genders, derivatives associated with their own gender's genitals are associated with libido, and not anxiety. Although other interpretations might be equally viable based on this data, this could be taken as support for those theorists who believe that females do cathect, and take pleasure in, their own genitals, and that their genitals are not necessarily associated with anxiety and longing for the penis. Despite the heuristic value of these interpretations of the data, however, they were not formulated as hypotheses beforehand, and therefore did not risk falsification. Only subsequent research will be able to substantiate these claims.

In summary, as expected, gender differences are ubiquitous. Furthermore, in many ways it appears that the data is more cohesive, and fits theoretical expectations better, for males than for females. This too should not be surprising; throughout his career Freud often admitted that he was unsure of his theory concerning women, whom he once referred to as the "dark continent." In a letter to his friend and colleague, Karl Abraham, Freud states: "As I gladly admit, the female part of the problem is extraordinarily obscure to me" (Abraham & Freud, 1965). The results of this investigation suggest that the "female part of the problem" continues to be elusive from a strictly Freudian perspective (see Appendix C for the views of psychoanalytic revisionists on female sexuality).

Review of experimental design and conditions

Although, as noted above, the bulk of the hypotheses were corroborated, a number of hypotheses were not corroborated, which is therefore inconsistent with the underlying Freudian theory being tested. As discussed in the Introduction, on Lakatos' (1978) view, Freud's topographic theory provided the "hard core commitments" for this investigation, and was therefore protected from refutation by a belt of auxiliary hypotheses, including the experimental conditions, the dependent variables used, etc. Therefore, according to Lakatos (1978), when a hypothesis is not corroborated it is necessary to examine these auxiliary hypotheses and experimental particulars, as this is where the arrow of *modus tollens* is aimed (see also Weimer, 1979). Toward this end, the experimental conditions and particulars will be revisited, followed by a discussion of the hypotheses which were not corroborated.

First, due to the relatively small sample size of this investigation (N = 30 for many tests), the statistical power was quite low. According to Cohen (1992), assuming a medium effect size (e.g., a correlation of about .30), for a study to have adequate power (beta = .80) using an alpha of .05, it needs at least 85 subjects. The importance of power is that without it one runs the risk of failing to reject the null hypothesis when it is in fact false. Although this is not a new concept, Sedlmeier and Gigerenzer (1989) note that most researchers still ignore the power of their tests, which, paradoxically, leads to a lower chance of obtaining significant

results if there is a true effect. Because many of the tests in this study which failed to reach conventional levels of statistical significance were in the "predicted direction," it is possible that the low power of this investigation did not allow for fair tests. Unfortunately, this can only be answered by subsequent research using a larger sample.

Regarding the experimental conditions, recall that the group setting, with anonymity insured, was used as it was expected to lessen social anxiety and allow for relatively uninhibited drive expression. As Freud (1921/1948) notes: "... in a group the individual is brought under conditions which allow him to throw off the repressions of his unconscious instincts" (pp. 9-10). Before applying this perspective to the present investigation, however, one could rightly question whether the participants truly represented a "group." They typically did not know each other, and only gathered together a few minutes before the experiment in a large room. Furthermore, there was no transcendent purpose, as there are in the groups which Freud (1921/1948) discussed in detail (the military and religious groups). In fact, initially the only shared characteristic was that they all came to earn credit for a university course. Freud (1921/1948) notes, however, that:

> We should have to start from the ascertained fact that a mere collection of people is not a group, so long as these ties have not been established in it; but we should have to admit that in any collection of people the tendency to form a psychological group may very easily become prominent. (p. 52)

Furthermore, in the present investigation there were certain characteristics which might have fostered this "group" mentality. First, all participants were there to receive extra credit. Second, they were all students in a large university, and therefore shared some common bond without even knowing each other. Finally, due to their roles as "subjects", all participants behaved in a passive way and submitted to the authority of the experimenter. On Freud's view, this is analogous to a handing over of the executive functions of the ego to the experimenter, now in the role of the ego ideal. Previous research (LeBaron, Reyher & Stack, 1985) found that this diminution of the executive functions of the ego is associated with an increase in suggestibility and regressive transference, two characteristics of groups which have been noted for years (Freud, 1921/1948). Furthermore, because the participants were told that they should not put their names on their drawings, deindividuation (Zimbardo, 1969) was expected to increase, thereby allowing participants to "throw off their repression" and become libidinally involved in the drawings. In fact, this is one of the fundamental auxiliary hypotheses underlying this research program; to reiterate the core assumptions: 1) the pencil is an extension of the finger, 2) graphically creating a body part is tantamount to touching it, 3) touching a body part arouses sexual instincts (wishes) and, 4) their preferred infantile aims, 5) this satisfaction is subject to prohibition and is thereby 6) anxiety-producing.

Lending support to these core commitments, and the experimental

conditions, was the evidence for differential levels of libidinal involvement and conflict across stimulus objects, especially in the figure drawing and imagery conditions. In other words, "touching" the different objects did lead to theoretically consistent differentiation in levels of conflict.

Because this theoretically consistent ordering of conflict occurred with many of the imagery variables, the auxiliary hypothesis regarding "temporal displacement" appears to have survived. Furthermore, examination of imagery protocols (some examples can be found in Appendix Q) reveals that the drawings did appear to influence the course of the imagery. Recall that according to Freud (1900/1955), the psychic apparatus allows unconscious wishes to seek out derivatives in the Pcs. as long as they escape detection by the censorship, which allows for disguised gratification in the system Cs. In other words, if the wish is too blatant the censorship will inhibit the wish, causing it to become "dammed up" until it can find a suitable outlet (e.g., one that will not lead to "unpleasure"). Freud (1920/1963) notes: "The ego discovers that it is inevitable for it to renounce immediate satisfaction, to postpone the obtaining of pleasure, to put up with a little unpleasure..." (p. 444; see also Freud, 1900/1955). Evidence for temporal displacement onto the free-drawings was not as compelling, however (although derivative formation did align itself with the "expected order of conflict").

Why might this displacement have worked better on the imagery than the free drawings? An examination of the particulars of both

experimental situations should lead to some answers.

First, both situations involved "temporal" delay, in that there were at least a few seconds between the completion of the figure drawing and the beginning of the free-drawing or imagery. The second similarity is that they both used figure drawings as stimulus objects.

The differences between the situations are more numerous. The most important are: #1) The free-drawings were stimulated by drawing the figure drawing, while the imagery was stimulated by a "tracing" of the figure drawing; #2) imagery involves verbal behavior, while the free-drawings involve graphomotor behavior; #3) the free-drawings involve only one "derivative" (the participants only drew one object), while the imagery involves a whole flow of derivatives (they spoke for at least five minutes); #4) imagery is not dependent on artistic skill, as are drawings, and #5) the free-drawings were done in anonymity and in the group setting; the imagery, on the other hand, was done individually with an experimenter in the laboratory.

All of these differences are clearly important, although some would appear to explain the aforementioned difference in "temporal displacement" better than others. The first difference noted above would appear to have increased the threat in the free-drawing situation because it involved actually "touching" the human body; in the imagery the participant was touching tracing paper laid on top of the figure drawing. If we follow the aforementioned core commitments of figure drawing,

perhaps the tracing paper was like "clothing," and therefore might be expected to have lessened the threat of the situation. Perhaps this diminished threat allowed for greater libidinal activation in the imagery? Regarding difference #2, on Freud's view both imagery and drawing are plastic media and are therefore capable of expressing unconscious fantasies, but, as noted in #3, because the free-drawings involve only one derivative, and therefore only a small part of an overall unconscious fantasy, the imagery might be expected to perform better, simply because of the increase in data.

Finally, regarding differences #4 and #5, Freud's ideas concerning narcissism and the ego ideal (1914/1949) are germane. According to Freud, the ego ideal, which includes the imago of the most powerful parent from childhood, is a harsh taskmaster which is constantly deriding the ego for not living up to its standards. Later in life, other authority figures are easily "put in place of" the ego ideal (Freud, 1921/1948). Therefore, in the present investigation the experimenter, someone with authority (he or she is aligned with the university), who is forcing the participants to do something that they do not usually do, and who will be examining their work, might easily be "put in place of" the ego ideal.

Furthermore, in this investigation most of the participants were likely untrained artists, and therefore the task of drawing objects which they know will be examined by the experimenter/ego ideal likely led to the possibility of narcissistic injury because they believed they would not do a

good job and "measure up."[53] On Freud's (1920/1963) view, this leads to flight when the ego, operating under the sway of the self-preservative instincts (fight or flight), anticipates a traumatic state; flight is graphically depicted on the drawings by doing them quickly as evidenced in an impoverishment of detail, sloppy lines, etc., all of which were prominent in the current free-drawings (and some figure drawings, for that matter).

Therefore, in the group setting (where the free-drawings were done), the participants could have recourse in flight, by completing the drawing quickly and leaving the situation (they were allowed to leave as soon as they were done). The participants did not have this same luxury in the imagery condition, however. First, they were told that the imagery session would last at least five minutes for each stimulus object, so in order to do a good job (which they want to do to placate the experimenter/ego ideal) they had no recourse in "flight." Second, because they were with the experimenter, they could not avoid the situation at hand without risking narcissistic injury due to the belief that the experimenter/ego ideal would find them weird, be angry for "messing up the experiment", etc.

In summary, for a number of reasons, the imagery appears to be a "better" modality than free-drawings for mediating displacement of unconscious fantasies piqued by drawing the human body.

Another potential source of error in the present investigation stems

[53] This is likely true even though the drawings were not done directly in front of the experimenter, and the participant's name was not put on them. The participants were aware that they would be returning for a second testing session, and, with any intuition at all, might have assumed that the experimenter would examine the drawings in connection with the second testing session.

from the assumptions regarding the automobile drawing. Recall that, according to the auxiliary hypotheses, drawing the automobile should generate less anxiety than drawing the human body, because the automobile drawing does not involve "touching" body parts. Although there was evidence for the validity of this assumption in the present investigation, for many of the tests the automobile was not the least conflictual object, as expected.[54]

How can we explain this? Although the automobile drawing has been shown in previous research (Handler et al., 1964) to be equivalent in difficulty to drawing the human bodies, there was evidence in this investigation that this might not be the case, especially for females. In reevaluating the results of his research program on figure drawings, Reyher (1997) notes that females probably are not as practiced in drawing cars as are males. Although not based on empirical knowledge, common knowledge (and clinical experience) suggests that males tend to draw more cars, airplanes, rockets, etc. than females. Females tend to draw more people, flowers, etc. Therefore, the task of drawing an automobile is likely to be more novel for females than males, and, potentially, more novel than drawing the human body (which they may have done many times before).

Again, Freud's views on the ego ideal and narcissism are relevant. For the female, drawing an automobile, a novel object, might lead to

[54] This may also reflect problems in comparing SGI on the auto drawing with SGI on the figure drawings, as noted by Roach (1984).

greater anxiety and impoverishment of drawings (indexed by SGI) due to the anticipation of narcissistic injury from doing a poor job and not living up to the ego ideal/experimenter's expectations. In this case, SGI may index the insufficiency of the ego to live up to the ego ideal, and have little to do with Oedipal or other sexual wishes. Furthermore, this anxiety may be greater on the automobile drawing than the human figure drawings, with which they may have more experience. Finally, this anxiety may lead to the ego's inability to use EGBs in conjunction with egoistic strivings (to do a good job); the only recourse is flight. It is possible that this is the source of the large negative correlations between SGI and EGB that were found in this investigation, rather than "dammed up libido." Unfortunately, the present investigation does not allow for a definitive answer; this remains a question for future research (see below).

In a similar vein, another methodological concern with the present investigation was that some of the predictions were based on comparisons across human figures. Aside from the aforementioned problems with "stimulus pull," it seems possible that the female body might be more difficult to draw than the male body because they typically involve more attention to attire, adornments (jewelry, etc.), as well as breasts. It is therefore somewhat surprising that this has not been systematically addressed in any of the previous studies in this research program (although brief discussions of this can be found in Hamernik, 1985; Roach, 1984). This problem is especially relevant in the present investigation, because the

participants, unlike in previous studies, were asked to draw a specific person (mother, father). Therefore, unlike the opposite gender drawing (where they could draw anyone; on Freud's view, this would therefore be a derivative), the participants had to draw a specific object, which has specific characteristics. This might be especially anxiety provoking for untrained artists, because it can become patently clear that their drawing looks nothing like their mother or father, so there is ample evidence regarding their "failure" to do the task well.[55]

Reevaluation of non-corroborated hypotheses

With these thoughts in mind, I will now discuss those hypotheses which were not corroborated. Hypothesis 2, which involved the predicted that derivatives which are more remote will generate less resistance, was not corroborated for males. However, before dismissing this hypotheses we must examine the auxiliary hypotheses involved. First, the prediction involved the variables COVERT and RESISTANCE. While RESISTANCE is relatively straight-forward, and easily derivable from topographic theory, COVERT is not. Note (Appendix L) that this scale is simply the average of all COVERT scores for an imagery session; therefore it is a relatively rough measure, and does not allow for examination of the blatancy of specific derivatives. As a secondary analysis, REMOTE IMAGERY was used. This scale is even more

[55] In this regard, a number of subjects made comments such as "That looks nothing like her" and "Boy, I hope he doesn't see that" when touching up their drawings of the parent.

problematic, as it incorporates a hodgepodge of psychoanalytic ego psychology, topographic theory, and some esoteric rankings on my part. It is therefore likely that these scales did not offer a fair test of the hypothesis.

Hypothesis 3 ("Derivatives which are sufficiently remote will exhibit greater evidence for some libidinal gratification"), was tested with the prediction that WORDS would be positively correlated with LIBIDO and ordered according to the "expected" order. This hypothesis was not corroborated for either males or females, although the correlations were all positive for males, and positive on three of four objects for females.

A number of auxiliary hypotheses are relevant here. First, based on Freud's (1920/1963; 1911/1949) ideas concerning thinking, words are derivatives, and are therefore compromise formations which are acceptable to the censorship. Therefore, they should allow for some gratification, albeit minor. As WORDS is not a scale, it does not suffer from the inevitable theoretical auxiliary hypotheses that go into attempting to measure a construct. On Freud's view, it is a direct measurement. The only "error" would come from mistakes in transcription, deleted passages, etc., and effects due to the experimenter (because one experimenter "pulled" for more imagery than another, etc.). The more problematic variable would therefore appear to be LIBIDO. In examining Appendix K, the first potential problem is that the final score takes into account not only libidinal material, but also the "defense demand"; therefore, it is not a

pure measure of libido. Furthermore, "blatancy" is part of the scale, and not the actual derivative; therefore a theoretical guess is "imposed" on the derivative regarding blatancy. For these reasons, it is possible that the correlation between WORDS and LIBIDO was confounded by theoretically invalid and unknown properties of the scale.

Prediction 5d expected that, for males, anxiety on the figure drawings (SGI, CASTRATION) would be positively correlated with derivative formation on the free-drawings (DERIVATIVES). These correlations were found to be typically negative, however, and sometimes significantly so (especially the correlations between CASTRATION and DERIVATIVES; see Table 28). Recall that this prediction was based on the notion that anxiety would lead to a "damming up" of libido, which would then seek other suitable outlets (such as derivatives on the free-drawings). Therefore, this failure is somewhat puzzling, although Freud's ideas concerning derivative formation and the ego might help explain it. Freud (1920/1963) notes that derivatives, being compromise formations, require an ego that is capable of synthesizing activity. Perhaps, then, an increase in anxiety leads to a disorganization of executive and synthetic functions of the ego, and therefore derivative formation can not take place. Hence, the negative correlations between anxiety and derivative formation.

The only hypothesis based on Freud's ideas concerning the castration complex that was not corroborated was that females would exhibit more feelings of worthlessness than males. One problem with this prediction

that immediately comes to mind is related to the aforementioned discussion of the ego ideal. According to Freud, conscience monitors the ego and ensures that needed narcissistic supplies are secured from the ego ideal. An adverse reaction (unpleasure) occurs when the ego fails to live up to the expectations of the ego ideal, and self depreciation is one sign of this adverse reaction. Freud, in a discussion of melancholia, notes that:

> It is not so obvious, but nevertheless very probable, that the misery of the melancholiac is the expression of a sharp conflict between the two faculties of his ego, a conflict in which the ideal, in an excess of sensitiveness, relentlessly exhibits its condemnation of the ego in delusions of inferiority *and in self-depreciation.* (italics mine, Freud, 1921/1948, p. 107)

As discussed above, drawing in the presence of the experimenter/ego ideal, even in the group setting, could lead to the ego's anticipation of a traumatic state due to the poor quality of the drawing. Furthermore, doing imagery to the drawings, something the participants had obviously not done before, might also lead to anxiety about "not doing it right." Therefore, self-depreciating comments could come from a number of sources unrelated to the castration complex, and would be similar for males and females, because, according to Freud, the ego ideal behaves identically across genders. On this view, this hypothesis is untenable.

Hypothesis 6, which examined the dynamics of derivative formation in females (as did hypothesis 5 for males), was not corroborated. This gender difference is easily accommodated for in topographic and Oedipal

theory, however. This is because, as noted above, according to Freud females have lesser castration anxiety than males (as demonstrated in hypothesis 8), and castration anxiety is one of the main dynamic forces responsible for derivative formation, displacement, etc. Therefore, we would expect less theoretically consistent behavior in this regard for females.

The insignificant findings for hypotheses 10, 11, and 12 are therefore puzzling. Recall that these hypotheses predicted greater conflict, derivative formation, and significant differences in graphic indicators of anxiety and libido across stimulus objects for males compared to females.

One potential problem with hypotheses 11 and 12, however, is that they compared medians across stimulus objects, which as discussed above, is problematic. Hypothesis 10, however, examined the magnitude of correlations for variables of opposed processes, which proved to be a powerful technique in this investigation. It appears, then, that we must look elsewhere for an explanation for this failure.

The first place to look is at the hypothesis itself, and the theory from which it arises. Specifically, it was expected that females, lacking castration anxiety and therefore the motive for the dissolution of the Oedipus complex, would exhibit less conflict and censorship than males. As noted above, however, it is possible that one source of anxiety in this investigation was unrelated to Oedipal wishes, and was instead due to the threat of narcissistic injury. Because this threat was equally relevant for

males and females, and could account for the negative correlations on some of the variables of opposed processes (e.g., EGB.SGI), this hypothesis may not have received a fair test. Until we are able to tease apart anxiety that stems from the ego's anticipation of a failure to live up to the ego ideal, versus anxiety related to sexual wishes, this question will remain unanswered.

Future directions

Based on this discussion, it appears that the next "critical experiment" in this research program will need to address some of the aforementioned difficulties. Specifically, it will need to attempt to differentiate more clearly between anxiety related to the ego's failure to live up to the ego ideal, and anxiety related to unconscious sexual wishes.

One possibility for doing this would be to use trained artists; specifically, artists with experience drawing human figures and automobiles. Because drawing will not be a novel task, and should be something that they know they are "good" at, they should have less anxiety stemming from anticipation of narcissistic injury for doing a poor job and not living up to the ego ideal's expectations. Therefore, differences in SGI and EGB across objects might be more reliably related to unconscious wishes than anxiety and flight due to the threat of narcissistic injury. Furthermore, any potential narcissistic injury could be mitigated even further if the drawings were collected in a non-threatening situation (e.g.,

in an art class, when they do not believe that the drawings will be examined).

Another avenue for future research would be to have participants draw a specific person of the opposite gender (but not their mother/father), and then compare that to their "free" opposite gender drawing, which theoretically should be a derivative. If there is greater anxiety on the specific drawing, we might conclude that predictions based on comparisons between drawing the mother/father (a specific object) and drawing any opposite gender person are suspect. This is because the anxiety would be more related to the ego ideal, and the realization that one is doing a poor job because the drawing does not look like the person in question, than any unconscious wishes related to the Oedipal object.

Finally, it might be interesting to use the imagery data from the present investigation to explore further another research program that is undergirded by Freud's topographic theory. Specifically, Reyher and associates (Reyher, 1988; see also recent investigations by Gaines, 1994, Oster, 1996) have been examining what they believe to be a predictable and cyclical sequence of derivatives in the psychic apparatus, which is evident in all mentation and behavior, and is easily codified. These derivatives allow the researcher to follow the advancing sexual instinct as it increases in intensity and moves toward its aim-- gratification. These derivatives remain unconscious despite increasing intensity, and eventually condense to form unconscious fantasies which provide a template for the

propagation of analogical models of the object and aim of the sexual wish.

This sequence of events has been named TOD, which stands for tumescence-- orgasm-- detumescence, due to the ubiquitous presence of derivatives of these phenomenon. In essence, TOD is the course of an advancing instinct presentation in the psychic apparatus that "...can be construed as a device for replicating repressed wishes and unconscious fantasies in different substrates along a dimension of blatancy-remoteness" (Reyher, 1988, p. 79).

Because the imagery from the present investigation was obtained in four different "conditions," and was stimulating by "touching" different objects which theoretically should involve different levels of conflict, it might be interesting to examine these imagery protocols for differences in the TOD sequence. Would imagery to the mother lead to more remote derivatives in the TOD sequence compared to imagery following the opposite gender drawing? Would imagery following the automobile drawing demonstrate as much evidence for the TOD sequence as imagery following the human figure drawing? It seems that a number of interesting possibilities could be tested.

The results of this investigation also have implications for the use of projective drawings. First, Freud's topographic theory has proved to be an excellent theoretical scaffolding from which to interpret drawings. This is not to say that other theoretical formulations are not equally valid, but simply that certain phenomenon (derivative formation, disguised wish-

fulfillment) are better explained by Freud's topographic theory. Other theories may be better at explaining other phenomenon. For example, the Kinetic Family Drawing, which involves a child drawing a picture of his or her family (and themselves) doing something together, lends itself to interpretations based on object relations theory. As an example, one young boy, who came from an intact family, was exhibiting behavior difficulties following the birth of a sister. His Kinetic Family Drawing showed him, in his mother's arms, on one side of the page, with his father on the other side of the page. His new baby sister was nowhere to be found. The meaning to this drawing, as it relates to his relationship with his mother and other family members, is quite clear, and demonstrates the value of an object relations perspective in this regard. However, the perspective discussed herein might be equally informative in examining the drawing for evidence of displacement, derivatives, etc. In other words, the two perspectives are not mutually exclusive, and each adds something to the interpretation.

This investigation also calls into questions the way that some of the "anxiety markers" in figure drawings have been interpreted. Specifically, evidence continues to grow that erasure, shading, emphasis line, and reinforcement should not be considered simply indications of anxiety, as they once were. For example, it the past, if an adolescent drew a man with a hand that was erased, it was often interpreted as indicating "anxiety over masturbation" (see Hammer, 1958). This investigation (and Freud's

topographic theory), however, suggest that this is only half the picture. In fact, this erasure is a compromise formation; it is a denial of the "offending" hand, but it is also libidinal (erasure involves "rubbing" the body part). In a sense, the erasure is the masturbation (disguised wish-fulfillment). Therefore, in examining figure drawings for anxiety indicators, as well as derivatives, Freud's notions concerning compromise formations should be kept in mind.

Summary

In summary, this investigation provided cogent evidence for many of the core theoretical assumptions in Freud's topographic theory; derivative formation, conflict between wish and prohibition, Oedipal intensity leading to castration anxiety, and ubiquitous gender differences were all evident. Furthermore, the ability of human figure drawings to both stimulate, and to mediate the displacement of, libido was also evident. This investigation therefore suggests the this research program is continuing to produce new findings and evolve, both hallmarks of a "progressive" research program (Lakatos, 1978).

APPENDICES

APPENDIX A

Empirical Investigations of Castration Anxiety

The empirical investigation of castration anxiety has been quite extensive. In order to organize this large corpus of literature, this section will briefly describe them in groupings according to the measures used to quantify castration anxiety.[56]

Figure Drawings

In 1954, Hammer initiated a line of research which set out to examine differences in psychosexual adjustment between rapists and pedophiles (a summary and theoretical discussion of these studies can be found in Hammer [1957a]). Although not directly measuring castration anxiety, they do demonstrate the possibility of using the House-Tree-Person (HTP) test (which requires the subject to draw a house, a tree, and a person) in assessing psychosexual conflict. Two assumptions guide these studies. The first is that rapists should be more like "normals" than pedophiles (in terms of psychosexual adjustment), and the second is that the drawing of the tree allows for projection of "deeper" unconscious attitudes towards one's body. In this first study, he examined the HTP drawings of 31 rapists and 33 pedophiles who were incarcerated at Sing Sing. Aside from the HTP's, participants answered a number of inquiry questions,

[56] The following dissertations were unavailable for loan, and were therefore not discussed here (Collins, A. C., 1980; Eisenbud, R., 1951; Ellman, C. S., 1970; Lewis, 1969; Lipkins, R. H., 1987; Weiss, J. B., 1981; Weissbein, K., 1989). The interested reader can find abstracts for each of them in Dissertation Abstracts International.

including "How old is the tree?" and "Is it alive or dead?", and "How old is the person drawn?" Results demonstrated that the rapists assigned a significantly older age to their trees than did pedophiles (24 years compared to 11 years). No difference was found between the two groups on the age ascribed to the person drawings, although the pedophiles ascribed an older age to their female than their male drawings. These results are interpreted as reflected the earlier psychosexual fixation of pedophiles compared to rapists.

Another study (Hammer, 1955) involved 31 rapists, 33 pedophiles who approached female children, and 20 who approached male children, all of whom were at Sing Sing (whether these are some of the same participants as in the previous study is not disclosed). Aside from the hypotheses of the previous study, this study also set out to examine the hypothesis, derived form clinical lore, that the drawing of "dead" trees was an indicator of psychosexual conflict. The results demonstrated that dead trees were drawn most often by the homosexual pedophiles, next by the heterosexual pedophiles, and least by the rapists. However, only the difference between the rapists and the homosexual pedophiles was significant.

In a final study in this research program (Hammer, 1957b), 60 men convicted on sexual felonies were given a battery of projective tests, including the HTP, the Rorschach, the TAT, and the Blacky test. Twenty inmates who were not jailed for sexual offenses served as controls.

Ratings for degree of castration anxiety and phallic inadequacy were made on a five-point scale for each test. Finally, the 80 protocols were examined by one of three judges (who remained blind as to the status of the subject), and were given a global rating regarding feelings of phallic inadequacy. For analyses, those subjects with a global rating of 1 or 2 (extreme castration anxiety) were combined, and those with 3, 4 and 5 were combined. Comparisons of these two groups found that 90% of the sex offenders were in the high castration anxiety group, while only 55% of the control prisoners were (this was statistically significant). Hammer suggests that these results support the idea that castration anxiety is one of the motivators for committing sex offenses.

In summarizing this line of research, Hammer (1957a) noted that data from a number of tests including the HTP, the Rorschach, and the TAT all seemed to converge on a number of conclusions. Aside from those already discussed, he noted that the sex offenders often displayed feelings of "genital inadequacy" which he interpreted as signs of unconscious castration anxiety. On the HTP's he found that, compared to non-sex offender prisoners, the sex offenders displayed more phallic symbols and that the "Chimney, tree branches, arms, noses, legs, feet, hands, and ties are portrayed as damaged, cut through, broken or withered" (p. 328).

The three studies that follow all used participants who had been through, or were about to undergo, some type of surgery. Before

addressing each of these, it should be noted that all three authors concluded based on an increase in indications of "bodily damage" that participants were demonstrating increased castration anxiety. However, one would expect that people about to undergo surgery might produce more of these types of indications, so their conclusions are somewhat suspect.

Hammer (1953) used the HTP test to examine sexual symbolism in eugenically sterilized participants. Based on the writings of Freud and Fenichel, as well as his own previously discussed work, he created a scoring system to assess castration symbols in these drawings (see Appendix F). Participants included 20 white males who had undergone surgical sterilization, and a control group of 20 white males who had gone through other surgical procedures (such as tonsillectomy). HTPs, as well as chromatic HTPs (done with crayons), were done both before and after the operation (the before drawings were termed the "original drawings," and those drawings done immediately before and after the operations were termed the "operation drawings"). It was discovered that in the operation drawings 13 of the 20 experimental participants manifested four or more of the 54 signs of castration. Of the remaining experimental participants three displayed three signs, one participant two signs, and one one sign. In the control group, no participants responded in the operation drawings with more than two signs. This difference is significant. However, it should be remembered that one major difference between these groups was that the experimental group was forced to have the operation, and the

effect of this is unknown.

Pollitt, Hirsch and Money (1964) also demonstrated that psychosexual issues could be portrayed on the DAP. They examined 6 patients with irreversible sexual impotence as a sequel to priapism. They found that 4 of the six drew a female first, and 4 drew the female bigger than the male. Although not a true experimental study, it does point to the possibility of using the DAP to assess sexual conflict.

Irwin and Kovacs (1979) studied 60 children (30 male and 30 female), 30 of whom were entering the hospital for surgery. Along with a battery of other projective tests, the DAP and TAT were administered and scored for castration (defined as evidence of bodily damage or psychic injury, real or fantasized). They found at both pretest and posttest significantly more castration anxiety in the stories for the hospitalized group. Furthermore, in the hospitalized group castration anxiety was higher after surgery. On the DAP, castration anxiety was also scored (unfortunately they do not say how, except for "omission of body parts"). They found that hands and feet present in the preoperative drawings were missing in the postoperative drawing; there was also often marked distortion of limbs and/or many erasures. In some cases one limb was shown as being smaller than the other, or greatly exaggerated, as though to compensate for an injury.

Finally, as part of a large scale study of the figure drawings of children, Mortensen (1991) found that the amount of depiction of genitals

(including the navel, hair on the chest, and inner organs) fell clearly into two age clusters-- the highest amount of genital depiction occurred in those aged 5-6, or 10 and beyond. Mortensen takes this as support for Freud's psychosexual stages, in that there was more concern with one's sexuality during the phallic and puberty stages compared to the latency years.[57]

As is evident from this review, a number of studies have found results which support psychoanalytic theory. However, these studies typically do not manipulate sexual arousal, and are therefore difficult to interpret from a strictly Freudian perspective, in which castration anxiety is a specific outcome of sexual arousal. Furthermore, these studies are typically not grounded in any firm theoretical base, leading to a number of difficulties in interpreting the results.

The Blacky Test

In 1949, Blum attempted to rectify this lack of theoretical background when he developed the Blacky test. From its inception it was designed to more directly assess Freud's psychosexual stages and conflicts than was currently available with the other projective tests. Specifically, this test involves a number of cartoons depicting a dog named Blacky, as well as his mother, father, and sibling. When given to males Blacky is described as the son, and when given to females Blacky is described as the

[57] An interesting corollary to these findings comes from a study by Feiner (1988). In interviewing children about anatomical consistency (including integration, body cohesion, and body-self continuity), he found that children's anxiety about "body integrity", which purportedly could be related to castration anxiety, was highest in the age range 3-5 (corresponding to Freud's phallic phase), compared to both 2-3 and 5-6 year-olds.

daughter. The use of dogs was thought to ease subject's projection of more repressed material.

Since its inception this test has been used widely, although some debate as to its validity remains (see Taulbee and Stenmark, 1968; Schaeffer, 1968). For Blum's original monograph (1949), participants included 119 male and 90 female college students. All of the results of this extensive manuscript will not be discussed here, but certain of the hypotheses tested bear directly on castration theory. For example, based on psychoanalytic theory he predicted that oral eroticism and castration anxiety would be correlated (Fenichel, 1945). A significant correlation of .35 was found. The predicted correlation between Oedipal intensity and castration anxiety was insignificant (r = -.08), as was the correlation between masturbation guilt and castration anxiety (r = -.08). Also, no significant difference in castration anxiety was found between males and females. Since the introduction of this test, however, many studies have used it and found significant results regarding castration anxiety.

Lasky and Berger (1959) used the Blacky test to examine psychological changes following genito-urinary surgery. Thirty male patients were given the test soon after their admission to the hospital, and then again about six days after the surgery. They found, as predicted, that significant changes were found on the masturbation guilt, castration anxiety, and narcissistic love object subscales. Unfortunately, they do not state whether these scores were higher or lower following surgery.

Sarnoff and Corwin (1959) also used card VI (the so-called "castration card"-- it depicts a dog with a blindfold on who's tail is on a block, with a knife floating above and another dog looking on) of the Blacky test to examine the hypothesized relationship between excessive castration anxiety and fear of death. Participants, 56 college males, were first given a questionnaire regarding their fear of death as well as a morality scale, followed by the Blacky card. Approximately four weeks later, participants were randomly assigned to either a high or low sexual arousal group. The "high" group viewed a series of photographs of nude women. In the low arousal condition, the pictures were of fully clothed fashion models. After the experimental manipulation, participants again filled out the fear of death and morality questionnaire, as well as a manipulation check (no psychometric information was given for either of these measures). T-tests indicated that there was no difference in fear of death between the two groups at pretest. However, a significant correlation was found between castration anxiety and fear of death. Furthermore, participants with higher castration anxiety showed a significantly greater increase in fear of death following sexual arousal than did low castration anxiety participants. Participants with low castration anxiety showed no significant difference in fear of death based on experimental manipulation. Finally, the alternative hypotheses that these results could have been due to moral guilt was not supported.

Clary and Tesser (1985) set out to examine a possible alternative

explanation for these findings. They suggested that perhaps it was general anxiety, and not specifically castration anxiety, which led to these results. Participants were given card VI of the Blacky test and an index of manifest anxiety, as well as Sarnoff and Corwin's fear of death scale and a death anxiety scale. They used three experimental groups, consisting of a sexual arousal condition, an aggressive arousal condition, and a neutral condition, and predicted a correlation between fear of death and sexual or aggressive arousal for both men and women. They found an insignificant correlation between castration anxiety and both fear of death scales for men in the high arousal condition. The strongest relationships found were between manifest anxiety and fear of death and death anxiety for men in the sexual arousal condition. They conclude that Sarnoff and Corwin's findings were not replicated, as well as their prediction of a general anxiety factor.

Block and Ventur (1963) used the Blacky test to examine 40 adult males, 20 of whom were amputees. They found, as predicted (since they have already been symbolically castrated), that the amputees exhibited less castration anxiety, less guilt from masturbation, and less Oedipal intensity.

Karon has examined castration anxiety in a number of studies using a modified Blacky card, in which the other figure is removed from the castration card. Theoretically, these studies are based on his work with schizophrenic patients, in which he has found castration anxiety related to both the father and the mother, with the fear of the mother sometimes being earlier (developmentally), and more terrifying, than the fear of

father (Rosberg & Karon, 1958). In 1964, Karon set out to examine this notion experimentally by testing 30 male schizophrenic patients (who had received neither ECT or insulin coma treatments) with the castration card from the Blacky Test as well as the TAT. Karon modified the Blacky card by omitting the onlooker, and also modified the inquiry to include questions about what happened and who was responsible, as well as "Would it be more frightening if a man was responsible for this or if a woman was responsible." The same questions were then repeated, except that they referred to dogs and not to human beings. Karon reasoned that these questions would allow participants to reveal which parent they see as castrator, and if the fear of one parent serves as a defense against the fear of the other. He posited that if one fantasy serves as a defense against the other, the defensive fantasy should seem more likely, and the defended against fantasy should seem more frightening. It was also hypothesized that projections to the dog would revel deeper fantasies that projections to human beings. He found that the most easily aroused fantasy was of the father as castrator. However, most of the patients reveled that the mother as castrator would be more frightening. The results were corroborated to a highly significant degree on the questions referring to the dogs.

In 1970, Karon set out to examine whether these aforementioned dynamics were particular to schizophrenia, or whether they were applicable to all human beings, as theorists such as Fairbairn (1952) have maintained. Thirty-two white males were testing using the same procedure

as in Karon (1964). Again, it was found that the most easily aroused castration fantasy is that the father is the castrator. However, as found in the previous study, the more feared, and possibly "deeper" fantasy is of the mother as castrator. Therefore, it is suggested that this dynamic is applicable to males in general, and not just schizophrenics. Karon goes on to note that castration threats are usually made by the mother in our culture (Huschka, 1938), as opposed to the father, who was the more likely during the time in which Freud was formulating his ideas regarding castration anxiety.

Shill (1981a) furthered this work by examining the hypothesis that father-absent sons would identify the mother as castrator more than the father. As mentioned above, Karon (1964, 1970) demonstrated that castration anxiety regarding the mother is present in many males. Shill predicted that this would be more true in father-absent versus father-present males. He also predicted that for father-absent males the mother would be seen as the more frightening castrator than the father, and that they would be less self-assertive. Thirty-six college males who had lost their father before age eight were compared to a random sample of 113 college males, whose fathers were still alive. These control participants were further subdivided into groups based on their self-reported interactions with their fathers. Measures included the modified castration card (as described by Karon, 1964) of the Blacky Test, and 5 cards of the TAT, all shown in the group format. The TAT stories were scored for

assertiveness (see Shill, 1981a, for a description of this scoring scheme). Although just failing to reach the .05 level of statistical significance, the father-absent participants tended to view the human female as the more frightening castrator, and to identify the dog's mother as the more likely castrator than the dog's father. However, significantly more father-absent participants identified the female dog as a more frightening castrating figure than the human female. In terms of assertiveness, it was found that father-absent males demonstrated less TAT assertiveness than father-present males.

A final study which used the Blacky test in this manner was undertaken by Schill (1966). He hypothesized that males would tend to view the father as the castrating agent, while females would tend to view the mother as the castrating agent. Thirty-eight male and 60 female undergraduate were shown the castration card and asked which family member most likely arranged for the dog's tail to be cut off. Although the majority of both genders chose "papa," a greater proportion of males compared to females chose "papa," while a greater proportion of females compared to males chose "mama," as predicted.

As is evident in this review, as with the previously discussed studies which used figure drawings, most studies that have used the Blacky test have failed to manipulate sexual arousal; therefore they do not allow for a fair test of hypotheses related to castration anxiety.

The following two studies attempted to rectify this, using a modified

version of the Blacky Test developed by Bromberg (1967). For his dissertation, Bromberg (1967) set out to study the interaction of castration anxiety with sexual arousal and "anticipation of pain." Specifically, he wanted to ascertain whether the motive of fear (evoked by the "realistic" threat of pain from an upcoming electric shock) could be distinguished from anxiety (evoked by activation of repressed castration fear), and how each of these motives affected participants desire for affiliation or isolation, and their phobic ideation. The castration anxiety measure consisted of showing the participants two cards, one being the Blacky "castration card", the other being a control card of a lithograph depicting school girls studying at their desks. Participants (219 male college students) were required to write a story about the card, and then respond to nine questions, on a seven point scale (agree or disagree) about the picture (the questions were derived from Blum's original work). These questions addressed the level of castration conflict, and included such things as "The dog is thinking desperately about a way to save his own tail." A median split divided the subjects into low and high castration anxiety groups. Half of each group was subjected to either high or low sexual arousal (by viewing pictures of women in either highly sexualized or neutral poses). Sexual arousal was also manipulated using tactile stimuli; in the high arousal condition the students handled stimuli which had "highly representational similarity to the male and female genitals..." (p. 50), while in the low arousal condition the stimuli had no such

similarities. Following these procedures, subjects were administered a phobic ideation measure which consisted of an inventory of fears theoretically related to castration (fear of dental procedures, etc.), and a "control" inventory of fears, both of which were also given prior to the experimental manipulations. Finally, subjects were asked to rate the degree to which they preferred to be alone or with others during the period before the alleged shock was to occur.

He found, as predicted, that participants in the high castration anxiety/high sexual arousal group demonstrated more phobic ideation theoretically related to castration (fear of dental procedures, stinging insects, etc.) than participants in the other experimental groups. Furthermore, a factor analysis of a general phobic ideation inventory revealed a "castration" factor, with high loadings on fears theoretically related to castration.

A dissertation by Saltzstein (1970) used this same measure to examine the relationship between castration anxiety and Oedipal conflict as a function of repressive and sensitizing defenses. Participants included 378 high-school boys, who volunteered to be in the study. She hypothesized that boys exposed to an Oedipal arousal situation (a story about a boy's sexual longing for his mother) would demonstrate more castration anxiety than boys exposed to a "non-Oedipal" sexual situation (a story about a boys sexual feelings for his girlfriend) or neutral story (about love for a dog). Furthermore, she predicted that boys with repressive defenses (assessed via

the Byrne Repression-Sensitization Scale) would demonstrate less castration anxiety following the Oedipal arousal condition. Following reading the story, the participants were given the castration card from the Blacky Test, as discussed in Bromberg (1967). They then completed a questionnaire about their childhood, which consisted of questions related to "trauma" supposedly relevant to Oedipal issues (including events such as injury to self, loss of father, birth of a sibling, etc.).

Neither hypothesis was corroborated. She notes that perhaps the levels of sexual arousal were not achieved, which seem a reasonable assumption due to the obvious and blatant nature of the Oedipal story. Post-hoc analyses, however, found that if the boys had experienced "trauma" during the Oedipal period, they did demonstrate more castration anxiety following Oedipal arousal, suggesting that castration anxiety may not be a universal outcome of Oedipal feelings, but instead may only be prevalent if the Oedipal period of development was disturbed in some way. Another interesting finding (although not quite statistically significant) was that boys who had sisters born during their Oedipal phase had higher castration anxiety than subjects whose sisters were born at other times. This is in line with Freud's belief (discussed in the Introduction section) that if a boy see's a girls genital's during the Oedipal period, he may view their lack of a penis as evidence that castration can and may take place.

The Thematic Apperception Test (TAT)

Schwartz (1955) developed a TAT measure for castration anxiety in the following way. Participants (54 undergraduate males) were divided evenly into three groups and shown one of the following films: the "castration group" was shown a film depicting the subincision rites of the Arunta, a Bushman tribe of central Australia. This rite includes splitting the skin on the underside of the penis and the urethra; the "loss of love group" was shown a 12 minute section of the the film "The Quite One," which is about the treatment and rehabilitation of a severely unhappy and maladjusted boy. This film section includes scenes depicting the boys loneliness and isolation, as well as the deprivation of love from his parents; the "control group" watched a part of the Chaplin film "In the Park." Immediately following the film, participants completed a questionnaire about their emotional reactions to the film. Participants were then thanked for their participation and asked to remain in order to participate in another, independent experiment. A second experimenter then administered the TAT in a group format.

Before examining these protocols Schwartz gleaned from the psychoanalytic literature a number of descriptions of events and fantasies believed to be related to castration anxiety, and then grouped them into categories such as genital injury, damage or loss to other body parts, etc. (see Schwartz [1955] for a description of these categories). This same methodology was used to create an anxiety over loss of love measure.

Scoring involved a simple frequency count of all scorable material in the TAT stories. Inter-rater reliability was found to be .80 and .92, respectively.

He found that the overall castration scores differed significantly between the groups, with the castration group scoring higher than both the loss of love group and the control group. No difference was found between the loss of love group and the control group. Furthermore, 6 of the individual scoring categories also differentiated significantly between these groups. The anxiety over loss of love scale did not prove to be effective, as both overall and individual scores did not differentiate between the groups. Finally, content analysis of the stories revealed that many of them did contain typical Oedipal material: "Stories scoring high in castration anxiety typically started with a description of the hero engaging in some sexual misbehavior, usually with a woman described as a prostitute or as otherwise immoral. The hero was generally described as an inadequate or undesirable individual... Following the sex act, the hero was described as tormented by remorse and guilt, and often as well by threats or punishment from external sources" (p. 217).

In order to further validate this measure, Schwartz (1956) conducted two further studies designed to test other psychoanalytic hypotheses regarding castration anxiety. The first of these was the supposed relationship between castration anxiety and homosexuality (Freud, 1931/1950; Horney, 1924). He compared the TAT protocols, given

individually, of 20 overt homosexual college males with those of 20 randomly selected college males.[58] He found, as predicted, that homosexual participants had higher overall castration scores, as well as higher scores on four of the individual categories. The second study examined the hypothesis that males would have greater castration anxiety than females (Freud, 1924/1949; Deutsch, 1930). Twenty male and 20 female college students, matched for religion and socioeconomic status, were given the TAT in a group setting. Again, as predicted, males scored higher on the overall measure, as well as on two individual categories. Schwartz concludes, then, that this measure is a reliable and valid measure of castration anxiety.

A dissertation by Brener (1969) set out to examine castration anxiety as related to sexual fantasy and sexual adjustment. He used the Schwartz measure of castration anxiety, as well as one which he developed for use with the Holtzman inkblot test. His scale included 50 items, which were grouped into many categories related to castration anxiety (see Brener, 1969). Basically, it scored imagery such as "...people or animals who are described as damaged, or as having parts missing, or physically inadequate, responses related to death, description of inanimate objects as damaged or inadequate, sexual content, and exaggerated or repeated phallic imagery, which was thought to reflect a compensatory defense against castration anxiety" (p. 32). Forty male students were given both the TAT and the

[58] It should be noted that the two groups were taken from different colleges, and that different TAT cards were used for the two groups, although 4 of the cards were the same.

Holtzman inkblots, and then read three stories which were either neutral (20 participants) or highly sexual (20 participants). Following the first and second stories, participants were again given the Holtzman inkblots; following the third, they were given the TAT (the reason for this repeated measures design was not given). Finally, participants were given a structured interview designed to assess their sexual adjustment.

The data failed to support the hypothesis that castration anxiety increases as a function of sexual fantasy. However, those participants who reported higher levels of arousal did tend to have higher scores on certain of the subscales, such as death imagery and threat. Also, no relationship between castration anxiety and sexual adjustment was found. Before drawing any conclusions, however, some rather important flaws in the methodology should be addressed. First, the experimental manipulation would seem to be too obvious, especially with the repeated measures. This was confirmed by the fact that some participants did say that they thought they were supposed to give sexual material to the inkblots. Second, the sexual adjustment rating was based on an interview. This is unfortunate, because it seems likely that even if a participant was experiencing sexual difficulties, he might be unwilling to report this to a stranger. Finally, it is unfortunate that no correlation was reported for the two castration anxiety measures, as this would have allowed for a check of convergent validity.

Kamil (1970) used the Schwartz measure, as well as the Rorschach scored for castration anxiety according to the categories of Schafer (1954),

in order to assess changes due to systematic desensitization. He used snake phobia because of the snake's assumed symbolic relation to castration anxiety in psychoanalysis (Fenichel, 1945). Four groups of participants (10 in each group) were tested; the groups consisted of one experimental treatment group and three control groups: Group 1-- snake phobics (experimental treatment group), Group 2-- snake phobics (nontreated group), Group 3-- general phobics (nontreated), and Group 4-- normals (control group). Snake phobia was assessed using the Fear Survey Schedule, which was given to 1,000 college males. Participants were selected based on their responses, with general phobics demonstrating the same fear level as the snake phobics, but without any fear of snakes. At pretest participants were tested on their ability to touch a harmless caged snake, as well as given a measure of manifest anxiety. They were then given selected cards of the Rorschach and TAT by another experimenter, with a different experimental rational. One week following this, participants in the treatment group entered into a six-week course in standard systematic desensitization. All participants reported no anxiety following their tenth session. One week following completion of desensitization, all groups (except for the general phobics, who did not differ on the pretest castration measures) received posttesting, consisting of the same pretest procedures except that after completion of Rorschach and TAT responses, participants were asked to give an additional response (referred to as Posttest 2-- the rational for this was not given).

Both the TAT and Rorschach measures were found to have adequate inter-rater reliabilities, and validity was checked by examining the difference between the groups on each measure. Both tests significantly discriminated between phobics and normals, but not snake phobics from general phobics. Unfortunately, the correlation between the two castration anxiety measures was not given.

At post test, it was discovered that systematic desensitization had significantly lowered manifest anxiety as well as significantly removed the symptom. On the Rorschach measure of castration anxiety, however, the treated vs. non-treated snake phobics did not differ in castration anxiety, and both groups remained higher than normals (these results held for both post test 1 and 2). On the TAT measure, the treated snake phobics were significantly lower on castration anxiety then the non-treated snake phobics, but still not as low as normals. As the Rorschach has traditionally been viewed as a "deeper" test than the TAT, Kamil concludes that desensitization did not affect the deeper level conflict, but did increase the "ego strength" (e.g., mastery by the hero) on the TAT. He hypothesized that this additional ego strength comes from both the increased sense of mastery and competence due to treatment, and a quantum of energy freed for adaptive use by the reduction in fear (and perhaps defense).

Shill (1981b) used the Schwartz measure to examine gender identity as related to whether the father was present or absent during childhood. He found that father absence was significantly related to higher castration

anxiety, and concludes that these results suggest: "...the importance of the father in enabling the son to master such anxiety, and clearly illustrates one of the central phenomenon relating to the Oedipus complex" (it is unfortunate that he did not also use the Schwartz measure in the 1981a study described above, as it would have allowed for cross-validation between this measure and the Blacky measure.)

Finally, in her dissertation Bradford (1967) used a modification of the Schwartz measures to examine gender differences in anxiety. She predicted, based on psychoanalytic theory, that males would exhibit more anxiety concerning physical threat and castration anxiety, while females would exhibit more anxiety around social fears of rejection, embarrassment, and anxiety over loss of love. She also predicted that these results would be influenced by how "traditional" males and females were in their "gender roles." Specifically, she assumed that the college major (physical education or elementary education) might allow for a rough grouping into "masculine" and "feminine" males and females; education majors were assumed to be relatively more "feminine" for males, and physical education majors were assumed to be relatively more "masculine" for females.

Sixty college students were given a self-rating anxiety scale based on the Murray need schema; specifically, it examined the need to avoid harm and the need to avoid rejection. Participants also completed an objective anxiety index, and the TAT, scored using a modified version of the

castration anxiety scale of Schwartz (it did not include the "Loss of cathected objects" and one other subscore; these were thought to index loss of love rather than castration anxiety per se).

She found that males did not exhibit more castration anxiety than females. She did find, however, that females exhibited significantly more anxiety over loss of love than did males, on all three scales. Further, there was some evidence that females had more loss over love relative to castration anxiety. No differences across major were found on either of the scales.

In summary, Schwartz's (1955) measure appears to be relatively successfully in a number of different ways. However, as with most studies discussed to this point, it has typically been used to examine differences between groups that should, theoretically, differ on castration anxiety; therefore, there is no manipulation of sexual arousal. Finally, the scale involves a number of categories which are somewhat removed from what might typically be thought of as "castration anxiety." For example: "Description of women in stories as low, immoral, prostitutes, seducers", and "Societal scorn, ostracism, etc." are both scorable. Clearly these are difficult to derive from Freud's descriptions of castration anxiety, and therefore what this scale is actually measuring is open to debate.

The Rorschach Inkblot Test

I could only find one study which used a specially designed Rorschach scale to examine castration anxiety. Levin (1966) set out to examine the female castration complex by developing a Rorschach measure of female castration. This measure was developed to correspond with the major components of the female castration complex as delineated in the psychoanalytic literature, and included subcategories, with corresponding Rorschach measures purportedly indexing these subcategories, including: castration anxiety, penis envy, confused body image, penis fantasy, etc. (see Levin, 1966, for the actual measure). The Rorschach measures included both traditional Rorschach scores (such as form level) and thematic and stylistic features thought to be relevant to castration. As one example, subcategory 4 (penis fantasy) included Rorschach percepts with phallic symbolism (e.g., "I see someone with a very long nose"). Psychometric information regarding this scale was not reported. She hypothesized that women scoring higher on this measure would exhibit more masculine social roles than those with scoring lower. Participants consisted of 51 white college graduates with no history of psychiatric treatment. Twenty-six of these women were unmarried career women, and 25 were married homemakers. The women did not differ in terms of SES or intelligence.

The results, which took into account response productivity, demonstrated that career women scored significantly higher in castration

anxiety than did the homemakers, and this result was not due to general psychological disturbance. It was also found that the eight categories of the castration measure appear to be independent of each other, and that three were significantly higher in the career women-- these were achievement content, male sex disturbance (thought to be a measure of penis envy), and active human movement (thought to be a measure of independence and self assertiveness). Furthermore, results for phallic symbolism, and female and male general disturbance were in the predicted direction, although not significant. One point which remains unanswered is whether these types of responses are causes or consequences of the participants' sexual roles. This question remains for further exploration.

Berg and Berg (1983) examined the Rorschachs of 33 adult hypospadiacs and 36 matched controls. Hypospadias is a malformation of the penis which often leads to surgical correction, often between the ages of 3 and 6 (i.e., during the phallic and Oedipal phases). The Rorschachs were examined "...with regard to formal aspects such as form levels. localizations and determinants... and to content and response processes" (p. 145), and were taken from a rating scale by Humble and Settergren-Carlsson (unfortunately they do not detail this rating scale).

They found that the hypospadiacs exhibited lower "ego strength" and capacity for social relations, as well as greater hostility, anxiety, and castration anxiety, than the controls. Finally, they were judged as showing less self-esteem and less "activity" than the controls. They suggest that

these differences suggest neurotic functioning in the hypospadiacs, and believe that this findings points to the importance of castration anxiety in neurotic functioning. Obviously, however, other interpretations could be made. For example, perhaps the parents' behavior was different with the deformed boys due to their malformation, or perhaps the peer group was more vicious. Finally, whether the surgery can actually be related to castration anxiety is questionable.

Other Methods

A dissertation by Ritz (1969) examined the relationship between aggressive behavior in latency age boys and unresolved Oedipal conflict. Specifically, she predicted that boys who were especially aggressive and uncontrolled during latency would also display continuing Oedipal conflicts, as well as evidence for functioning at Piaget's "pre-operational level."

She studied 20 boys from 8 to 11 years of age, all of whom were especially aggressive and exhibited "uncontrolled" behavior. She used a battery of projective tests, including the Rorschach, DAP, and TAT. She examined the Rorschach for "responses to projections, long center details, and other phallic shaped portions of the cards... assumed to refer to sexual interest or preoccupation" (p. 30). For the DAP, "emphasis upon arms, legs or fingers, particularly if they are 'missing' or have been 'cut off', or the inclusion of phallic shaped objects are assumed to indicate some

problem with sexuality." (p. 31). Finally, the TAT was also examined for indications of "Oedipal conflict." Unfortunately, however, each measure was simply scored for the "presence" or "absence" of Oedipal conflict, a relatively crude scoring system.

In a pilot study, she found that a group of aggressive boys did exhibit significantly more indicators of "Oedipal conflict" than a control group of boys. Furthermore, in the current study she found, as hypothesized, that boys who displayed continuing Oedipal conflict also exhibited pre-logical forms of thought and continued functioning at Piaget's "pre-operational level."

Sturman (1980) used Silverman's subliminal activation method (see Silverman, 1971; 1976)[59] in his dissertation to examine the effect of arousal of the castration complex. Specifically, he hypothesized that arousal of the castration complex would lead to regression in perceptual modes of responding to inkblots (using the Holtzman Inkblot Test); increases in levels of state anxiety (using the Speilberger scale); and decreases in word recall ability on a word memory task (using words both "negatively toned", "positively toned," and "neutral" for castration.

The subliminal messages used were a castration anxiety message "Father castrates," an aggressive message (but not castration) "Father argues," and a neutral message "People walking." Eighteen male and 18 female undergraduate students were selected based on their responses to

[59] While this method has generated an impressive research program, questions as to its validity remain (see a review by Balay & Shevrin, 1988).

card IV of the Blacky test; specifically, they were selected to represent a wide range in levels of castration anxiety. The dependent measures were administered before and after each of the three messages.

He found that both aggressive messages produced regression in perceptual functioning on the inkblots. Furthermore, against expectations he found no difference between males and females for the castration message. Also, no differences on the state anxiety measure were found between conditions or on any of the measures. However, because this is a self-report measures, its relevance to psychoanalytic principles is dubious. Also, the words recall test did not show any differences following the castration message, or any gender differences.

Friedman (1952) set out to examine the Oedipus and castration complexes via a variety of projective techniques, most notably a set of incomplete fables known as the Despert fables (see Fine, 1948). These fables deal with a number of personality dimensions, mostly relating to psychoanalytic concepts (including castration). For this study he created three fables (dealing with a projecting organ) which vary according to: the "humanness" of the character (in the first two fables the character is an animal), the level of focus upon the projecting organ, and the amount of libido attached to the organ (i.e., in one story the organ "always itched"). On all three dimensions story three was the highest and story one was the lowest. For example, story three is as follows: "Jimmy was a little boy. His finger always itched and he scratched and rubbed it all the time. The

more it itched, the more he scratched it. His parents told him not to scratch the finger but still, he rubbed it and scratched it whenever it itched. What do you think happened?"

He examined 305 "normal" children between the ages of five and 16 years, and predicted that children of Oedipal and pubertal ages, who are thought to be more beset with castration anxiety, should demonstrate less endings in which the organ is removed than the latency aged children. This hypothesis was corroborated. Furthermore, the percentage of children removing the organ increases as the stimulus strength of the fable increases, although all three fables yielded the same pattern of results regarding age as described above. When examined by gender, results for the boys again show less organ removal at Oedipal and pubertal ages. For girls, however, no difference between latency and Oedipal ages was found, although there were significantly less organ removal endings at puberty. Qualitative analysis of the story endings yielded results suggesting that older children were able to compromise between castration and avoidance (i.e., a tail is not lost, but some of it's hair falls out), while the younger children tended to deny or avoid the castration. This is taken as evidence of the greater ego strength of the older children. This study also examined Oedipal dynamics in these stories, but these results will not be described here (although they were quite favorable to psychoanalytic theory).

Another methodology which involves a potentially rich source of data material is the dream, which Freud called "*the royal road to a*

knowledge of the unconscious." (italics in original, 1900/1955, p. 608). Hall and associates at the Institute of Dream Research have done a number of studies which examine dream content and how it relates to Oedipal factors. One of these studies (Hall & Van de Castle, 1964) deals more directly with castration. They tested the hypothesis that males will report more dreams which involve castration anxiety than dreams involving castration wishes or penis envy, and this will be reversed for females. Participants included 60 male and 60 female college students, who were requested to report nocturnal dreams on a standard report form. Measures of castration anxiety (CA), castration wish (CW), and penis envy (PE) were devised based on psychoanalytic theory. The CA scale involved any of the following happening to the dreamer's body: actual or threatened loss to a specific part of the body, clawing or stabbing, defect of a specific part, some part being infantile, damage or loss to an animal of the dreamers, inability to use penis or other phallic objects, and dreaming of being the opposite sex. The measure of CW involved the same categories, except for they are scored when they happen to another person in the dream (the rationale for this is not fully spelled out). The categories for PE were as follows: acquisition within the dream of an object that has phallic characteristics, envy of a man's physical characteristics or performance, a female dreaming that she is a man, or is wearing male clothing, or has male characteristics. Each dream was scored, and the maximum score was 1 for each scale, although a dream could be scored

for more than one scale. The inter-rater reliability was found to be quite high for each scale. They found that with a high level of significance the majority of males had higher CA scores than CW or PE scores, while this was reversed for females. Furthermore, 50% of the women in this sample had a CA score of 0, while only 13% of the males scored 0.

A dissertation by Lane (1966) used an adaptation of the castration scale of Hall et al. (1964), as well as a number of projective techniques, including the Rorschach, TAT, and a sentence completion task, to examine personality characteristics and how the effect of stress and anxiety aroused by an upcoming operation is manifested in dreams. The dreams of five adults were recorded on four days preceding an operation, and these dreams were compared to dreams during a subsequent three-day postoperative period (the participants slept in a sleep laboratory, and were awakened when dreaming). The dreams were scored in a number of categories, including anxiety, cognitive disturbance, and castration anxiety.

He found that the dreams of those about to undergo surgery had significantly more castration derivatives than did those who were not. Furthermore, the preoperative dreams contained significantly more castration derivatives than did the post-operative dreams. Finally, males demonstrated significantly more castration anxiety than did females.

A similar study was undertaken by Schneider (1960). Her dissertation used a combination of many of the aforementioned methods, including incomplete stories and the Michigan Pictures Test, as well as

figure drawings and dreams. She was also attempting to examine gender differences in castration anxiety brought about by impending surgery, but rather than including adults, she studied 96 children, 46 of whom were about to undergo tonsillectomy or adenoidectomy. All of the children were between 6 and 10 years of age. In order to measure castration anxiety, she devised a scoring scheme based on the children's responses to the stories and pictures. Based in part on an earlier measure developed by Gurin (1953), this measure examined each story for the presence or absence of "hurt" (occurrences in which actual hurt or damage happens to any person or animal), or "fear" (occurrences in which a person or animal anticipates danger). Also scored were all references to loss of love, and "annihilation." The children's defensive reactions to the stories were also examined, using a defense mechanism hierarchy (denial, passive-submissive reactions, avoidance reactions, counterphobic and sadistic reactions, negativistic and retaliatory reactions, compulsive reaction, and active mastery).

Results demonstrated that boys had significantly higher castration anxiety than girls (including "hurt," "fear," and "annihilation"). However, boys about to undergo surgery did not differ in castration anxiety from the control boys. Interestingly, boys and girls in the surgery group did not differ in overall castration anxiety, suggesting that girls reacted to surgery with increased castration anxiety, while boys level of castration anxiety remained the same whether they were to be operated on or not. The only

difference between the experimental and control boys was that the experimental boys tended to show heightened defensiveness, especially by being unable to respond to the testing materials. On loss of love, girls were significantly higher than boys.

Unfortunately, the figure drawings were not scored in a quantifiable way, so the results are difficult to interpret. She states that: "The usual methods of scoring offered little of significance" (p. 59); unfortunately, these methods were not disclosed. However, an "experienced child psychologist" rated the drawings for indications of "general anxiety" (such as placement, constriction, sketching), anxiety in the body (overemphasis, distortions, transparencies), and castration anxiety (missing body parts, added parts). She found that only castration anxiety differentiated the boys from the girls, and no differences were found between the hospital and control children. The manifest content of the dreams was also examined; the hospital children reported more "hurt" dreams, and this was more pronounced in the boys. Overall, these results lend some corroboration to the results of Lane (1966).

Finally, a number of papers, which fall under the rubric of "psychoanalytic anthropology" (Róheim, 1952), have addressed castration anxiety. Basically, psychoanalytic anthropology involves examining primitive cultures, their taboos, myths, and ceremonies, in order to highlight the importance of psychoanalytic propositions. This practice began with Freud (1913/1953), but has been carried on most notably by

Róheim (1950; 1952) and Erickson (1950). This methodology was enhanced by John Whiting and colleagues, who developed a way to "test" psychoanalytic theory by using entire societies as single cases, and correlating these with child rearing practices and other customs.

For example, Whiting, Kluckhohn, and Anthony (1958) set out to examine dependency on the mother and rivalry with the father, as related to initiation ceremonies. They hypothesized that societies which have:

> ... sleeping arrangements in which the mother and baby share the same bed for at least a year to the exclusion of the father and societies which have a taboo restricting the mother's sexual activity for at least a year after childbirth will be more likely to have a ceremony of transition from boyhood to manhood than those societies where these conditions do not occur. (p. 364)

Basically, they believed that such ceremonies, which are often supposedly symbolic of castration, would be necessary in these societies to put a halt to the boys' Oedipal desires during puberty.[60] Transitional ceremonies were defined as only those ceremonies which had a least one of the following four events: painful hazing, isolation from females, tests of manliness, and genital operation. A sample of 56 societies were examined and coded for each of these variables. They found that of 20 societies in which both of the antecedents (sleeping arrangements and postpartum sex taboo) were present, 14 had initiation ceremonies. Of the 25 societies in which the antecedents were not present, only two have such ceremonies; this

[60] Rangell (1991) also discusses some recent work on primitive initiation rites and their relations to castration.

difference is highly significant. Further examination of the cases which went against prediction revealed that in many cases, unaccounted-for variables could explain the anomalies.

Stephens (1961)[61] set out to further this link, but in a more systematic way. He examined a single general hypothesis, but subjected it to many tests to further its likely validity. The hypothesis was as follows: "...the extensiveness of menstrual taboos observed in a primitive society is determined by the average intensity of castration anxiety felt by men in that society" (p. 391).[62] In part, he felt that this was because taboos were set up primarily to protect men (a notion which was also addressed by Horney [1924]). Second, he discovered that Menstrual taboos were significantly associated with sexual anxiety (see below), which he takes as possible corroboration of the relationship between castration anxiety and menstrual taboos. This extensive manuscript contains many details, and only the most pertinent conclusions will be discussed here.

Basically, menstrual taboo refers to the beliefs or superstitions about dangers inherent in mensuration, and to the avoidance customs which are a consequence of these beliefs (see Stephens, 1961). Sexual anxiety was also assessed for each society (this measure included six categories, including, for example, severity of sex training, prohibition of premarital intercourse, etc.). Basically, societies were rated according to the number

[61] Some of these results were later expanded and published as a book (Stephens, 1962).

[62] Róheim felt that the sight of a menstruating person would easily activate latent castration fear, but Freud's opinion regarding menstrual taboos is somewhat ambiguous (Stephens, 1961).

of specific taboos which they had, and then categorized as being "high " or "low" in menstrual taboos. Instead of attempting to directly measure castration anxiety, he examined the psychoanalytic literature to find a number of child rearing practices thought to be indirect antecedents of castration anxiety. Ten such practices were found, and they fall into three general categories: sexual arousal of the child by the mother, punishment for sexual activity, and the nature and severity of punishment for rivalrous behavior toward the father. Finally, the menstrual taboo scale was correlated with a hypothesized consequence of castration anxiety, the frequency of castration-suggestive incidents in folklore (including genital injury, severing, and all types of physical injury).[63]

In order to assess the child's sexual arousal by the mother, Stephens assumed that this was in part due to the mother's sexual feelings toward the child. He further reasoned that this would likely be higher when the mother was frustrated sexually. He therefore hypothesized a correlation between a long postpartum sex taboo and menstrual taboo. This correlation was found to be significant. Punishment for masturbation was also found to significantly correlate with menstrual taboos, as did severity of sexual training. All of the measures of the severity of punishment of rivalry with the father were in the expected direction, but only one area was significant; that was a significant correlation between societies in which the father was the main disciplinarian and menstrual taboos. When

[63] The psychoanalytic investigation of folklore and fairy tails has been widespread; Bettelheim (1976) is perhaps the most popular example.

these ten measures were combined into an overall antecedent to castration measure, the correlation with menstrual taboos was highly significant. In terms of level of castration-suggestive incidents in folklore, a curvilinear relationship was found for all three measures, suggesting that societies both high and low in menstrual taboos have the fewest castration themes in their folklore. However, this relationship was only significant for the "all physical injuries" category. In summary, 14 tests of the general hypothesis were undertaken, with 13 of them in the expected direction and 7 of these to a significant degree.

A final example of this type of work was completed by Graber (1981). He examined the meaning of male genital mutilation rites, using Theodor Reik's theoretical writings as a base; specifically, Reik's belief that the defense mechanism of projection plays an important role in male genital mutilation, because the man projects his unconscious hostility toward his own father onto his son (a notion that is in line with some recent revisions of the Oedipus complex; see Appendix B). He notes that there is a substantial correlation between "general cultural evolution" and male genital mutilation, and notes that any theory will need to account for this robust finding. He first discusses other studies and theoretical writings on the subject, and addresses what he believes are the inadequacies of other formulations about male genital mutilation. From here, he suggests that two variables which might be related to male genital mutilation are post marital residence pattern and degree of political development.

Theoretically, he believes that close human contact (e.g., patrilocal residence) always intensifies ambivalence, and continuous close contact increases the difficulty in repressing the hostile side of this ambivalence, leading to increases in "symptoms" such as male genital mutilation. He believes that the development of the state is also related for similar reasons; this is because mobility is thought to be a good means of resolving such generational conflicts. Prior to state formulation, group fission provides a good alternative to chronic internal conflict, while (according to Graber) the development of the state environmental constraints restrict such freedom of movement. In summary, he hypothesizes that:
"In light of Reik's projection theory, cultures having both patrilocality and the state should be more likely to practice male genital mutilation than cultures having neither patrilocality nor the state" (p. 425).

In order to test this, he sampled 250 cultures for which he had data relevant to patrilocality, level of political integration, and male genital mutilation. He found that male genital mutilation is found in 54 percept of cultures having patrilocality and the state, but only 6 percept of the cultures lacking these two traits. Furthermore, the presence of both patrilocality and the state was a more powerful predictor than either variable alone. Finally, of the cultures that are "mixed" (have either patrilocality or the state), 25 percept had male genital mutilation rituals.

As is evident from the preceding literature review, even with the aforementioned methodological and theoretical flaws there is some

compelling evidence for certain aspects of Freud's theories concerning castration anxiety. Theoretically expected gender differences, as well as differences between groups which should theoretically differ in levels of castration anxiety, have often been found. Furthermore, the wide range of methodologies and tests attest to the validity of some of Freud's propositions concerning castration anxiety. As has been discussed, however, perhaps the most pressing problem with this literature is that studies typically do not consider sexual (and especially Oedipal) arousal, which, according to Freud, is an integral aspect of castration anxiety. This is clearly the avenue that future work will need to address.

APPENDIX B

Other Psychoanalytic Views on the Oedipus and Castration Complexes

Since Freud's initial formulations, the castration and Oedipus complexes have been discussed, evaluated, and revised by both analysts and social scientists outside of psychoanalysis. Due to the vast nature of this literature, the following review will address only the more fundamental revisions and questions by citing a few of the more prominent papers. The reader interested in more in-depth analysis is directed to books Pollock & Ross (1988), Britton (1989), and a bibliography by Edmunds & Ingber (1977).

Early writings

Immediately following Freud's initial introduction of the "castration complex" (Freud, 1908a/1949), other analysts began to widen its application. For example, Stärcke (1921) believed that, because of the talion principal, any threat from the parents will be realized in fantasy as being directed at the spot in which the child feels the most guilt. This is usually the genital region, due to the early struggle around cleanliness and masturbation guilt. Therefore, even if actual castration threats were not made, the castration complex could still be evident. Stärcke also notes the enduring character of this "primal guilt": "The transgression of the orders regarding cleanliness leave the genital region with a primal guilt which

remains fixed for life, and all future expectations of punishment are in the first instance attracted to this region" (p. 181). Finally, Stärcke expanded the notion of castration to include being taken away from the breast (weaning) and other "losses", as well as the very act of birth, when the infant is taken away from the womb.

This theme was also addressed by Alexander (1923, 1935), who believed that the act of birth is the precursor to the expectation of castration, due to the loss of the mother's body and the fetal membranes. He states (1923):

> At the moment of birth a pleasurable condition (the pleasure of absence of stimuli) and a pleasure-giving organ (the uterus) are lost for the first time in life, and are replaced by a painful condition. The growing human being learns that every pleasure is closely followed by the loss of the pleasure-giving organ (uterus, nipple, stool); so that on reaching the pleasure of onanism his is already affectively prepared to lose the corresponding pleasure-giving organ, the penis... (p. 22).

Alexander believes that this affective connection explains why castration anxiety can be prominent even when there have been no direct threats of castration; he further believes that his explanation negates the need for phylogenetic theorizing, which Freud (1920/1963) used as one source of castration anxiety. Finally, he notes that another source of castration anxiety, aside from the well-known punishment for incestual wishes, is as a talion punishment expected due to castration wishes directed against the

father. In a sense, due to guilt the boy turns his wishes to castrate his father against himself.

Freud was not entirely in agreement with these formulations. In a footnote (from 1923) to the "Little Hans" case he warned that other writers were using the term too loosely: "... the term 'castration complex' ought to be confined to those excitations and consequences which are bound up with the loss of the penis" (p. 152). It should be pointed out, however, that in an earlier case history Freud (1918/1955) stated the following: "'Feces', 'child' and 'penis' thus form a unity, an unconscious concept (*sit venia verbo*)-- the concept, namely of a little thing that can become separated from one's body" (p. 563). Furthermore, even after writing the aforementioned footnote Freud again discussed the relationship of castration and birth (Freud, 1926/1936; see Gupta, 1984).

Fodor (1947), like Freud, decries the "looseness" with which the term castration is often used in psychoanalysis. Yet he acknowledges that, due to displacement and symbolism, castration anxiety can be expressed in a myriad of ways. Therefore, he defines castration as a "...self-imposed injuring, or impairing of function, of parts of the body that lend themselves to sexual representation" (p. 33).

Other early analysts expanded on Freud's views by examining other sources for the castration complex. For example, Jones (1933), in contrast with Freud, believes that the boy does have an unconscious knowledge of the mother's vagina, but the thought of penetrating it brings the fear of

castration, and as a defense against this he obliterates his impulse to penetrate (and the idea of the vagina), and moves into phallic narcissism and the belief that his mother must also have a penis. In other words, the thought that mother has a vagina is more threatening (due to castration anxiety brought about by the idea that father wants to penetrate the same opening) than the thought that she has a penis.

Horney (1932) believes that another source of castration anxiety is the boy's belief that his penis is too small for his mother, which leads to a feeling of "dread" due to his inadequacy. She believes that this injury leads the boy to narcissistically withdraw libido from his mother, leading him to deny the existence of the vagina, and thus leading to Freud's phallic stage. She also believes that some of the boy's castration anxiety is the ego's response to the wish to be a woman.

Reich (1931) extended Freud's view of the Oedipus complex, by addressing the manner in which its resolution leads to the formation of what he calls "character." He notes that the source of neurosis is not the Oedipus complex itself, but the manner in which it is resolved. He states:

> We can supplement Freud's dictum, that the Oedipus complex is destroyed by castration anxiety, by saying that while the complex certainly disappears it re-arrises in another form; it is transformed into characterological reactions which partly continue its main traits in a disguised form, but partly constitute reaction-formation directed against its basic elements. (p. 464; see also Lorand, 1939)

He also notes that herein lies the difference between healthy and neurotic individuals; in healthy individuals the Oedipus complex is not converted into characterological functions, but instead is overcome due to a withdrawal of energy.

Aside from these early papers[64], which were typically in agreement with Freud, a number of theorists began questioning some of the most fundamental aspects of the Oedipus and castration complexes.[65] These revisions will be addressed below.

Influence of pre-oedipal development

Perhaps the most pervasive revision of Freud's initial formulations relates to the importance of pre-oedipal issues on the course of the Oedipus complex. While Freud (1931/1950) was aware of the importance of pre-oedipal development, he never addressed this systematically. Fenichel (1930/1953; 1931/1953) discusses a number of cases which point to pre-oedipal issues and their importance on the later Oedipus complex, and Lampl De Groot (1952) notes that research has demonstrated the importance of pre-oedipal fixations and disturbances on later psychopathology, suggesting that the Oedipus complex is no longer considered the most important determinant of later neurosis. Gitelson

[64] Other variations and uses of the term "castration complex" are discussed by Fenichel (1925/1953), Fodor (1947), and Sinha (1964).

[65] A number of authors have noted that the in-fighting within psychoanalysis about the Oedipus complex reflects the fact that psychoanalysis is itself in the throws of an "Oedipus complex," and that these squabbles represent the different theorist's "Oedipal struggles" (e.g., Sacks, 1985; Simon, 1991; Olsen, 1995; Bollas, 1996).

(1952) agrees, and states that "The Oedipus complex has thus apical importance not so much as the nucleus of the neuroses but as the nucleus of normal character structure and as the basis of mature life" (p. 354). The influence of pre-oedipal development is thought to be especially relevant in female development (Stoller, 1977; see Appendix C). One recent clinical contribution will highlight the continuing belief in the importance of pre-oedipal development on the course of the Oedipus complex:

> ... when we extend the concept of the Oedipus complex to include the expression of early and primitive phantasies about the nature and interaction of the parental couple, we encounter features of these objects-- including their vulnerable and damaged state-- which are far more frightening and more damaging than phantasies of apparently powerful, successful parental sexuality, and these consequently constitute a more serious threat to the discovery of psychic truth. (Feldman, 1990, p. 41)

Developmental stage or developmental lack?

The second major revision involves the question of whether the Oedipus complex is a necessary step in normal development, or is instead a reflection of a problem in development. Kohut (1977) suggests that:

> ... the dramatic, conflict-ridden Oedipus complex of classical analysis, with its perception of a child whose aspirations are crumbling under the impact of castration fear, is not a primary maturational necessity but only the frequent result of frequently occurring failures from the side of narcissistically disturbed parents. (p. 247)

Erickson (1993) agrees, and notes evidence that secure bonding in the family serves as a natural foundation for incest avoidance. Therefore, he believes that:

> The adult who bonded securely in childhood should have stable intrapsychic boundaries between sexual and familial feelings. As a parent, he or she is therefore able to respond spontaneously and appropriately to a child's affectional needs, naive sexuality, and assertiveness. (p. 415)

A disturbed parent, on the other hand, may react to these same behaviors on the part of the child in an "...inappropriately sexualized manner" (p. 415), which might lead to typical Oedipal difficulties.

In a similar vein, others have noted that Freud's theory of the Oedipus complex stemmed from his work with neurotic patients (and his self-analysis), and should not therefore be taken as indicative of "normal" development (e.g., Chodoff, 1966).

Criticisms regarding its universal existence

The notion that the Oedipus complex is "universal" has been part of psychoanalytic lore from the beginning (Brenner, 1957). Although a number of large-scale anthropological studies have been conducted, with differing views concerning the outcomes (e.g., Malinowski, 1927; see also Jones [1925] rebuttal), these are beyond the scope of the present summary (although some examples can be found in Appendix A; see also Róheim, 1950, 1952).

A good summary of critiques regarding the universal existence of the Oedipus complex can be found in Schrut (1994), and Kupfersmid (1995) summarizes what he believes is the lack of evidence for the Oedipus complex. For example, he notes that many child researchers conclude that gender identity is formed at least by age four, before the age of the Oedipus complex (recall that according to Freud, gender identity is a result of the resolution of the Oedipus complex). He also questions, based on direct child observations, whether castration anxiety is prevalent in most children.

Friedman and Downey (1995) have questioned the existence of the Oedipus complex based on biological evidence. In a nutshell, they believe that aggressive impulses toward the father and fear of the father are not typically tied up with erotic fantasies, but are better explained as aspects of childhood play and the often realistic fear of harm from adult males.

The age of the Oedipus complex

Melanie Klein (1928) is perhaps the most influential theorist who posited that the Oedipus complex occurs much earlier than Freud thought. Specifically, she believes that the Oedipus complex begins in very early infancy, and that it is set in motion (for both sexes) by the frustrations experienced at weaning. These initial frustrations are reinforced through anal frustrations during toilet training.

Based on direct child observation, Behn-Eschenburg (1935) agrees

with Klein that the Oedipus complex actually occurs much earlier than believed by Freud. More recently, Roiphe and Galenson (1972), have found that there is a period, typically between the ages 15 and 24 months, during which genital manipulation increases significantly, but apparently without Oedipal content.

Furthermore, Greenacre (1968) believes that castration anxiety and penis envy occur before Freud's phallic phase, often by age 2 (A. Freud, 1951 also notes this). Roiphe and Galenson (1972) have found evidence for this, but suggest that castration reactions typically appear only in children who have suffered early experiences which interfere with a stable body image (such as birth defects, illness, etc.), or who have suffered from trauma which interfered with stable object representation (such as loss of a parent; see also Galenson & Roiphe, 1977). Therefore, the "universal" existence of castration anxiety and penis envy has also been called into question.

Importance of the family and the "Laius complex"

Perhaps the most important recent revisions of Freud's views have related to the influence of the parents on the course of the Oedipus complex. Beginning with Fenichel (1945), the personality of the parents and its effect on the course of the Oedipus complex began to gain greater importance. Furthermore, Fenichel (1945) notes that "...the Oedipus complex is undoubtedly a product of family influence. If the institution of

the family were to change, the pattern of the Oedipus complex would necessarily change also" (p. 97).

Jackson (1954) describes a number of cases of woman with Oedipal difficulties, and how they were related to difficulties in their early relationship with the mother. He summarizes:

> Their lack of identification with the mother and overcompensatory attachment to the father made them feel like boys who despised their femaleness and were afraid of and competitive with men. The main devices for escaping their unbearable dilemma were pregnancy fantasies or actual childbearing. The parental interaction constituted a nidus for the development of the girl's hysterical and phobic symptoms, and acting out. (p. 580)

In a similar vein, Bibring (1953) discusses the variations and difficulties with the Oedipus complex when a boy is raised in a matriarchal setting, and Neubauer (1960) summarizes previous work on one-parent families, all of which suggests that when one parent is absent there is a strong likelihood for difficulties in sexual identification and superego formation.[66]

Another major revision involves the importance of the father's feelings toward the child, and how this can influence the boy's Oedipus complex. For example, Mandler (1963) notes that the father often sees the child as a rival, which the boy will deduce. Furthermore, the mother may encourage this triangular relationship if she has a need to be the center of attention. He also notes that the relationship between the parents will be

[66] Freud briefly discussed the importance of these issues (e.g., Freud, 1910b/1957, 1905/1949) but never made a systematic statement on these effects (see also Fenichel, 1931/1953).

crucial in determining the effect of this jealousy:

> A mature relationship will be less disturbed by the new intruder; it may call forth less irrational jealousy on the part of the father, may make it more easily possible for the mother to accept the father's ego extension and may generally see less of a threat in the newcomer to the connubial relationship. (p. 232)

Rangell (1954) and Firestone (1994) also suggest that the parents' aggression toward the child for Oedipal rivalry has been greatly under appreciated. In fact, Firestone (1994) suggests that, in part, the boy's castration anxiety is due to his unconscious understanding of the father's death wishes toward him, due to their rivalry for the mother's love. This theme is also noted by Young (1994).

In this regard, a number of authors have reexamined the Oedipus myth to uncover important aspects of it which Freud left out, especially having to do with Oedipus' father, Laius (see Devereux, 1953, 1960; Ross, 1982, for discussions of these other aspects of the Oedipus myth). For example, Devereux (1953, 1960) has written extensively on what has been dubbed the "Laius complex", which refers to the behavior and conflicts in Laius, and how these affected Oedipus. He discusses how in many versions of the Oedipus myth Laius is described as a violent and evil man, who homosexually rapes a young boy. Furthermore, he notes that it is Laius who first aggresses against Oedipus, by piercing his ankles and leaving him for dead when Oedipus was just an infant. Devereux (1960) also notes that part of the myth which has not been addressed is the son's "homosexual

triumph over the feminized father," which is based on retribution for the father's homosexual aggression against the son. He also suggests that Laius' death has more to do with his character flaws, which were evident in the ancient Greek story, and has less to do with Oedipus' incestual wishes. He states: "We simply suggest that, according to Greek data, Oedipus' murderous and incestuous wishes were neither purely heterosexual nor truly spontaneous ones, but were induced by the behavior of his father" (1953, p. 135).

Devereux (1953) suggests that this differentiation is important clinically because it reveals that a father's aggressive and, in a veiled way at least, homosexual behavior toward his son may represent a defense against murderous impulses directed toward the son, elicited by the sight of the nursing boy, whose very existence interferes with the father's relationship with his wife. In other words, it is the father's murderous impulses toward the son which precede those of the son toward the father.

Bernstein (1976) also believes that a careful reading of the Oedipus legend reveals that it is the actions of Laius that set the tragic wheels spinning, and Edmunds (1985) notes that the theme of the father's murderous anger permeates the myths, and that not only Laius, but Oedipus himself, curses his two sons. As Freud only used one portion of the story in his formulations (Sophocles' Oedipus the King), which ends before Oedipus curses his sons, and begins after Laius' adventures, this part of the story is ignored. Bernstein (1976) suggests that:

> The conclusion is inescapable... Freud found Oedipus Rex 'gripping' because it put him in touch with his own childhood wishes and incest fantasies, but through this process of identification he projected these wishes upon Oedipus. Thus what Freud 'discovered' in Oedipus were forgotten parts of himself. (p. 403)

The importance of these ideas is also stressed by Ross (1982), who notes that Freud's identification with the character of Oedipus may have caused him to overlook (or repress) other important aspects of the story. He states:

> Once more the blind spots of Freud, who seems to have been so identified with Oedipus[67] ... are remarkable. Not only did he omit mention of Laius' crimes in his summary of the myth itself... [but] once he ceded his seduction theory, Freud also tended to ignore or to exculpate quite actively his patients' and subjects' fathers in the case histories.... repeatedly Freud neglected the familial reality lurking behind their psychopathology, ascribing the latter mainly to the workings of fantasy. (p. 189)

This "blind spot" has led some authors to question what may have motivated Freud to ignore these aspects of the father. By all accounts Freud loved and admired his own father deeply; perhaps, then, for Freud to truly understand Laius would have been to confront these impulses in his father. Other authors (e.g., Masson, 1984) have also suggested that this piety to his father was one reason why Freud abandoned the seduction theory; if the seduction theory were true, it might force him to believe that

[67] Freud's identification with Oedipus is also discussed in Olsen (1995).

his father had committed such atrocities.

The importance of these ideas is not simply theoretical, because they also suggest that important revisions in clinical work will need to take place. For example, Ross (1982) suggests that:

> ... when the analyst attributes his patients' hostile images of their fathers exclusively to the projection of their own guilt-ridden aggressive urges, he may inadvertently help solidify a defense organization. A resistance is fostered in which genuine neurotic conflict serves to screen the starker, more archaic anxieties which are stirred when an individual discerns or even merely imagines the possibility of a parent's ambivalence toward them. (pp. 194-195)

An interesting paper by Lindon (1992) suggests that Freud's "blind spots" may have caused him to misinterpret important material in the "Little Hans" case. In reexamining this case, which Freud believed lent evidence to the importance of the castration complex and the "innate instinctual components of his mind," Lindon suggests that Hans' difficulties were instead due to the behavior of his parents. Furthermore, he suggests that Hans' castration complex and his Oedipal difficulties were due to the undermining of his psychological structure before he reached the phallic stage. A rather lengthy quote will serve to summarize the "pathological" elements of Hans' parents behavior which Lindon (1992) believes were the real genesis of his neurosis:

> Though Hans slept in the parental bedroom and was exposed to parental nudity and sexual intercourse, and though he frequently accompanied his mother when she went to use the toilet, she persisted in lying, answering

> him that of course she had a penis. She inflicted rigorous toilet training on him. She pressured him not to touch his penis, including with this a threat to have the doctor cut it off. When irritated with him, she threatened him that she would go away and never come back, or that she would send him away. She threatened to whip him with a carpet beater. She seemed narcissistically vulnerable, grossly misattuned to his affective states; she was seductive, overstimulating, intrusive, controlling, and threatening. (p. 385)

Unfortunately for Hans, his father was not much better. Lindon believes that it was therefore the parent's pathology that led to Hans' Oedipal and castration anxiety difficulties. This goes along with other recent theorists (see above) who believe that the castration complex is not a necessary developmental phase, but is instead due to problems in development.

Other recent revisions

Although hinted at by Reich (1931), Loewald (1979) has laid special emphasis on the idea that the Oedipus complex is never really "demolished," as Freud often stated, because it reemerges during adolescence and later in life. For example, Loewald notes that during adolescence, in assuming responsibility for one's life, we are psychically murdering our parents, which brings on guilt: "Not only parental authority is destroyed by wresting authority from the parents and taking it over, but the parents, if the process were thoroughly carried out, are being destroyed as libidinal objects as well..." (p. 757). Therefore, repression of

the complex is an "...unconscious evasion of the emancipatory murder of the parents, and a way or preserving infantile libidinal-dependent ties with them" (p. 758).

Loewald's theory thus posits that guilt is one of the driving forces in the organization of the self. Therefore, if we deny or evade this "murder," and the subsequent guilt, development will be disturbed. In other words, he believes that we must "murder" both parents to truly grow up, and therefore it is parricide, and not castration anxiety, which is the most powerful force in Oedipal resolution (see Levy, 1995, for a good summary and comparison of these views).

Other recent papers have proposed additional sources for castration anxiety. For example, an interesting paper by Löfgren (1968) discusses the fact that volitional control of movements of body parts may be a necessary component in the development of a "body ego," and the mental representation of the body parts. Therefore, the penis, which throughout life remains somewhat autonomous in both activity and sensation, is much more precariously incorporated into the body ego, which may contribute to castration fantasies. He summarizes: "It is this my contention that the penis has a special relation to the ego body, to which it is much less firmly attached than most other parts, and that this circumstance might in itself give rise to fantasies about its possible loss" (p. 409). Mahler (1968), in a discussion of this paper, agrees with Löfgren's contention that the penis may also have a certain "object' quality to it, again contributing to

castration fantasies. She notes:

> It is the *entire complex* of its *erotogenic qualities* and the kinesthetic and highly versatile *positional* relation of the penis to the rest of the bodily self-representation which eludes the ego's synthetic function, I believe, which accounts for the *object quality* of the penis *vis-à-vis* the ego itself.... (italics in original, p. 411)

In a similar vein, Friedman and Downey (1995) note that Oedipal fears, when they do occur, take the form of castration anxiety because the external genitalia are integrated into the body image relatively late in development. Stufkens (1990) suggests that because the penis is able to tumesce, thereby defying gravity, it is felt to be less securely anchored than other body parts. He also notes the importance of the momentary loss of the penis from the visual-tactile field in this regard.

Mann (1994) suggests that another source of castration anxiety is "castration desire." He believes that castration desire stems from an attempt by males to deny differences with the mother, thereby denying the pain of separation. He believes that castration desire arises out of the realization of the anatomical differences between the sexes, and emerges as a response to earlier traumas such as loss of the womb and the breast. He suggests, however, that castration anxiety is a safeguard against this desire to fuse with the mother: "This earliest of desires to be absorbed by mother and deny difference through castration desire is resisted with the help of castration anxiety" (p. 517).

Finally, Friedman (1996) notes that throughout psychoanalytic theory the male testicles have been ignored. In fact, castration anxiety is almost universally related to the penis, even though castration proper typically involves the testicles. He believes that this gap has led to problems in the psychoanalytic theory of male sexuality, just as Freud's ignoring of the vagina led to difficulties in his psychology of women.

Other interpretations of the Oedipus myth[68]

Aside from the aforementioned reevaluations of the role of Laius in the Oedipus myth, some authors have noted other possible interpretations which have a bearing on our understanding of the Oedipus complex. For example, Van Der Sterren (1952) notes that in the story Oedipus is portrayed as having done his deeds unwittingly, against his will. The impulse to do these deeds came from without-- from the gods. However, Van Der Sterren notes that throughout the play there are indications that Oedipus does know the truth, at least unconsciously.[69] In this way, he suggests (as did Freud), that the play is like a psychoanalysis: "He [Oedipus] says that he will find the guilty person, but during his investigations he becomes stupid, does not understand what the conscience (Teiresias) so plainly says, finds all manner of pretexts for not discovering the truth, but yet has the courage to proceed with the investigation (the analysis)" (p. 344).

[68] A brief summary of the actual story of Oedipus can be found in Steiner (1985).

[69] A similar notion was addressed by Bemporad, 1995.

Similarly, Steiner (1985) notes that a careful reading of the Oedipus story suggests that there are really two interpretations, the first being the one Freud took, which was that Oedipus was an innocent man caught in a trap of relentless fate. However, Steiner also points out how another interpretation is that Oedipus (and the other lead characters) actually knew all along what was happening, but chose to "turn a blind eye" to this painful reality. He believes that this is also evident in clinical work:

> ... a pathological resolution of the Oedipus complex arises when the psychic reality of these impulses is denied and a cover-up of a perverse kind results. It is suggested that turning a blind eye is an important mechanism which leads to a misrepresentation and distortion of psychic reality. (p. 171)

Atkins (1966), coming from an Adlerian point of view, believes that a careful reading of all three books in the Oedipus cycle reveals that it is more about power strivings and authority than incest. In fact, he notes that very little of the cycle is about incestual feelings:

> The moral and religious message we have been seeking in Oedipus Rex is clearly not that man is endowed with an ontological drive toward incest, but that arrogant and persistent defiance of the will of the gods-- the rules of society-- can only end in tragedy. (p. 183)

Interestingly, this point was also raised by Devereux (1953) and Ross (1982), except that they were referring to Laius' behavior rather than Oedipus'. Finally, Carlisky (1967), from a Rankian standpoint, believes the legend also has pre-oedipal connotations, and can be seen as reflecting

fantasies and conflicts regarding Oedipus' birth.

Papers on the unconscious determinants of Freud's theory.

There have recently been a number of interesting explorations of the possible personal reasons behind Freud's insistence on the importance of the Oedipus complex and castration anxiety (some of the papers discussed thusfar have touched on this idea). Although a number of books have been written on this subject (e.g., Balmary, 1982; Cuddihy, 1974), I will only discuss two recent papers in an effort to highlight work being done in this area.

For example, Colman (1994) notes that Freud had a younger brother, Julius, who was born when Freud was 18 months old (Julius died six months later). Colman discusses the environment in which Freud lived at the time, and believes that Julius' circumcision likely had an important impact on the young Freud. She then goes on to cite evidence in Freud's later dreams and associations which she believes point to the fact that Freud repressed the memory and impact of Julius' circumcision. She summarizes: "Several elements of these dreams and some of Freud's own associations suggest a description of how Freud experienced Julius' circumcision and death, and routed that unconscious material into his theoretical construction of the Oedipal position and the castration complex" (p. 610). Furthermore, she believes that the fact that Freud never retrieved the emotions he experienced during Julius' circumcision might

indicate the importance (unconsciously) of that event. She therefore suggests that:

> When conceptualizing his theory Freud became stymied in his own minor observation of women as humans without penises, and was unable to explore the strength of his experience of seeing actual penile mutilation. Thus his theory regarding the castration complex and therefore his entire psychosexual development theory is limited by this repressed material. (pp. 622-623)

Hartke (1994) also believes that Freud's theory is in part based on repression relating to castration. He notes that the chronology of events in Freud's early life corresponds closely with his Oedipal theory, especially the timing of his weaning from the breast, anal concerns (with his brother's death from dysentery), and the sight of the female genitals (with the birth of his sister). Furthermore, he believes, based on an analysis of Freud's dreams and parapraxes, that it was Freud's repressed image of women as both "dangerous seductress and as phallic, omnipotent creator-destroyer" that led to his psychosexual theories. He believes that Freud was unable to become consciously aware of this maternal image due to filial piety, but that this was a powerful unconscious motive for Freud to see women as castrated and inferior. This notion has also been addressed (although not in reference to Freud personally) by Chasseguet-Smirgel (1976; see Appendix C).

Summary

As is evident, since Freud's initial formulations the Oedipus complex and castration anxiety have been addressed in numerous ways. Furthermore, recent work involving direct child observation and analyses of more disturbed individuals, where pre-oedipal disturbances are primary, have suggested that the Oedipus complex is perhaps not the apex of development, as Freud believed. Finally, recent work has suggested that the somewhat simplistic Oedipus complex which Freud described is rare, and issues such as the "negative" Oedipus complex, new ideas concerning female sexuality (see Appendix C), the importance of pre-oedipal development, and counter-Oedipal forces (parental attitudes, behaviors, etc.) have all added to the complexity and variety of phenomenon associated with the Oedipus complex (Simon, 1991). As Simon (cited in Sacks, 1985) noted: "Anyone who shoots at the Oedipus complex is shooting at a moving target since what it subsumes, explicitly and implicitly, has steadily changed over the last 70 or 80 years" (p. 203). The fact that it remains an important aspect of psychoanalytic theory, and is still the subject of vigorous debate, however, attests to the power of the ideas behind it, and lends credence to Freud's dictum that:

> ... if psychoanalysis could boast of no other achievement than the discovery of the repressed Oedipus complex, that alone would give it a claim to be included among the precious new acquisitions of mankind. (1940/1964, p. 193)

APPENDIX C

Alternative psychoanalytic views on the female "castration complex" and female sexuality

Freud's theories of female psychosexual development are perhaps his most controversial ideas. This is exemplified by the fact that they are still hotly debated today, just as they were when originally introduced. Because so much has been written on this topic, the following review will attempt to summarize the major areas of contentions, as well as the significant revisions of Freud's original ideas which are beginning to be accepted by the "mainstream" of psychoanalysis.[70] Finally, this review will concern itself only with ideas about the castration complex, penis envy, and female psychosexual development. For recent views on other contested ideas in Freud's psychology of women, such as the female superego, masochism, passivity, etc., see Blum (1977a; 1977b), Jacobson (1937/1976), Schafer (1974), or Shaw (1995a).

Early papers

The first psychoanalytic paper which deals exclusively with the female castration complex is that of Abraham (1920/1927). For the most part his ideas are in line with Freud's original contentions, but in addition he notes the dynamic importance of the castration complex in women

[70] The interested reader is also referred to books by Deutsch (1944-1945), Chasseguet-Smirgel (1970), Miller (1973), Strouse (1974), Nagera (1975), Blum (1977a), and bibliographies by Schuker & Levinson (1991) and Shaw (1995b).

(recall that Freud believed there could be no castration anxiety in women because the supposed "castration" had already taken place). Abraham believes that a number of common symptoms in neurotic women (the neurotic horror of wounds, operations, knives, etc.) can all be traced to the castration complex. Furthermore, he believes that a mother's castration complex can be an important contributor to a boy's castration anxiety, and is in fact even more important than any threats of castration that the child might have experienced.

Van Ophuijsen (1924) was also primarily in agreement with Freud's views, and introduced the term "masculinity complex"[71] to denote the behavior of those women who exhibited a strong desire to be a man. He also highlights the not uncommon desire in women to urinate like a man (a similar notion was was raised by Horney; see below).[72] He believes, like Freud, that it is the sight of the penis which is the wellspring of this complex, and concludes that there is an "... intimate connection between the masculinity complex, infantile masturbation of the clitoris and urethral eroticism" (p. 49).

Lampl De Groot (1927) also notes the importance of urethral eroticism in the girl's envy of the penis. However, she believes that the castration complex is a secondary formation whose precursor is the

[71] Later analysts have noted that penis envy and the "masculinity complex" are very different phenomenon. For example, Laufer (1986) states that: "Penis envy and competitive behavior with men express the wish for a penis, while the masculinity complex contains the fantasy of possessing a penis. The distinction marks the difference between normality or neurotic development, even distorted by envy and the need to compete with men, and more severe pathology which may contain a psychotic area at its core" (p. 270).

[72] An extensive case presentation by Fenichel (1925/1953) discusses many variations on this theme.

negative Oedipus complex (the girl's erotic attachment to the mother), which is brought to an end due to their discovery of their own "castration."

In a 1933 paper, she expands Freud's ideas further. She assumes that it is the narcissistic injury the girl feels at her "genital inferiority", coupled with her resentment toward her mother, who is held responsible for this slight, that leads the girl to renounce her "active" love and assume the "passive" role. She states that the girl must then "...permit herself to be loved in order to augment her injured self-love" (p. 498); at this point the "positive" Oedipus complex begins.

Hayward (1943) was also in agreement with Freud, but noted that the female castration complex is quite complex, and is different depending on the family constellation. For example, she believes that if the little girl has a brother who is about her age, her castration reaction will be much more severe. On the other hand, she notes that for those girls who do not have brothers: "When she becomes envious of the boy's possession she does so in a franker, freer manner with less hostility toward the possessor of the coveted appendage" (p. 53). She also highlights two typical types of castration complexes, which she labels the "wish-fulfilling type" and the "revenge type" (as did Abraham). She summarizes:

> The hypothesis is suggested that the little girl who falls pray to penis envy in the anal-sadistic stage is the one who develops into the revengeful type of woman. This is frequently encountered in cases where a little girl has been raised with a brother who is nearly her own age. The child is faced with the evidence of an anatomical

> difference between herself and the boy and is disturbed in a characteristic way by her seeming defect. The wish-fulfillment type of woman became preoccupied with penis envy after she had reached the phallic level. Such women had no brothers close to their own age. (p. 66)

Early disagreements with Freud

Aside from these early papers, however, a number of analysts, including some of Freud's closest friend's (Jones) immediately called into question some of his ideas. One of the first analysts to take major exception to Freud's views on women was Karen Horney.[73] Her first paper to discuss these differences systematically was published in 1924. While agreeing that the "castration complex" is an important aspect of neurosis in women, she disagrees with Freud's conclusion that females automatically feel "disadvantaged" compared to males due to their genitals. Furthermore, she suggests that if we shift our view of penis envy from a simple envy of the male organ, to a "desire to urinate" like a man, a different view emerges which explains this envy as a outcome of three separate but related desires. First, urethral eroticism, and the narcissism that goes with it, leads to envy because the boy appears to get more pleasure in urinating because he can hold his genital. Furthermore, the girl envies the boy's ability to "look" at himself and discover his own

[73] Bonaparte (1953), in her book on female sexuality, notes that there were two "camps" in the early days of psychoanalysis, one with Freud, Lample De Groot, Deutsch and herself, who assigned the masculinity complex to biological roots, while the others, most notably Horney (and also Jones and Fenichel), considered it from psychogenic causes such as a flight from femininity due to Oedipal guilt or disappointment from the father. For a good summary of these early debates, as well as an interesting notion regarding why the early ideas of Horney were not accepted into the "mainstream" of psychoanalysis, see Fliegel (1973).

sexuality, while the girl's genital is more concealed and difficult to examine. In this regard, Horney notes: "Just as woman, because her genital organs are hidden, is ever the great riddle for man, so man is an object of lively jealousy for woman precisely on account of the ready visibility of his organ" (p. 53). She speculates that the tendency (at least in this culture) for women to dress more fancy and adorn themselves more than men is due to the fact that as girls they could not "display" their genital organ as the little boy can.

Finally, she speculates that "penis envy" stems from repressed masturbation fantasies. She believes that women envy the man because they assume that because boys can hold their genital while urinating, they must have "permission" to masturbate. Horney summarizes her views as follows:

> The little girl's sense of inferiority is by no means primary (as Abraham has also pointed out). But it seems to her that, in comparison with boys, she is subject to restrictions as regards the possibility of gratifying certain instinct-components which are of the greatest importance in the pregenital period. Indeed, I think I should put the matter even more accurately if I said that as an actual fact, from the point of view of the child at this stage of development, little girls are at a disadvantage compared to boys in respect to certain possibilities of gratification. For unless we are quite clear about the reality of this disadvantage we shall not understand that 'penis envy' is an almost inevitable phenomenon in the life of female children, and one which cannot but complicate female development. (p. 54)

Horney also emphasizes the girl's wish to have a child from the father. She believes that when the girl's love for her father is disappointed, she renounces him and her desire to have a child. She then regresses back to the desire for a penis. She therefore sees penis envy as based on her envy of her mother for getting a child from the father; penis envy is a displacement for the desire for a child (rather than vice versa, as Freud believed). Following this displacement, the father is given up as a love object and is instead identified with. She believes that this is the motive behind the "masculine" behavior of some women. Therefore, the process of identification with the father is one root of the castration complex in women.

Finally, she believes that previous to penis envy there were always "strong and wholly womanly love relations to the father," and that it was only when this was disappointed that the "feminine role" was abandoned. She also believes that the typical castration fantasies are repetitions of the pain felt at fathers rejection: "..it is wounded womanhood which gives rise to the castration complex" (p. 63). She believes this also underlies the revengeful attitude to men which Freud felt was based on penis envy.

In 1926, Horney began to question whether one important wellspring for penis envy might be the social situation in which women were raised. She notes that "... a girl is exposed from birth onwards to the suggestion--inevitably, whether conveyed brutally or delicately-- of her inferiority, an experience which must constantly stimulate her masculinity complex" (p.

338). She also notes, however, that males are often envious of females due to their ability to have children, which is perhaps why men, to compensate, are more involved in cultural productivity.

In this paper Horney also introduces the concept of "primary" and "secondary" penis envy, concepts which were to be expanded on only decades later (see below). She labels the penis envy based on the discovery of the anatomical differences "primary" penis envy. She believes that the more important source, however, is due to a regression from the Oedipus complex, when, due to dread of vaginal injury from the father's "large" penis, the girl renounces the father and the feminine role. This is what leads to "secondary" penis envy, and it serves as a resistance to uncovering the girl's Oedipal desires. Finally, she notes that castration anxiety also stems from the girls difficulty in exploring her genitals; therefore she has difficulty seeing if her fantasies of genital damage due to her Oedipal wishes are real or not.

In a final paper on this subject, Horney (1932) further emphasizes the importance of female genital anxiety which is related to their own genitals (rather than to their lack of a penis, as Freud believed). In discussing the "dread of women," she emphasizes that castration anxiety is not sufficient to explain this dread felt in men: "A boy's castration anxiety in relation to his father is not an adequate reason for his dread of a being whom this punishment has already overtaken" (p. 351). Instead, she believes that the small child's anxiety in this regard is due to the

"insufficiency" of their genitals. The little girl:

> ...feels or knows that her genital is too small for her father's penis and this makes her react to her own genital wishes with direct anxiety; she dreads that if her wishes were fulfilled, she herself or her genital would be destroyed. (p. 356)

The boy, on the other hand, suffers anxiety because he feels that his penis is too small for his mother and reacts with dread at his inadequacy; Horney therefore feels that the original dread of women is not due to castration anxiety, but instead due to a possible diminution of his self-respect. She believes that this injury leads the boy to narcissistically withdraw libido from his mother, leading him to deny the existence of the vagina, and thus leading to Freud's phallic stage. She also believes that some of the boy's castration anxiety is the ego's response to the wish to be a woman.

Jones (1927), Freud's confidant and biographer, was another of the early analysts who had fundamental disagreements with Freud. In this paper he describes a number of cases of female homosexuality in order to elucidate the castration complex in women. He agrees with Abraham (1920/1927) that women suffer from castration anxiety as do men. However, he suggests that what both genders really fear is not "castration," but what he calls "aphansisis," or the lack of capacity for sexual enjoyment. In men this typically takes the form of castration, while in women it typically takes the form of a fear of abandonment, typically through the father's withholding of desired gratification (this is similar to Freud's

"fear of loss of love").

Jones believes that although primary penis envy as Freud described it is important, there is another source which is more important (in agreement with Horney). He believes that it stems from the privation resulting from continuing disappointments at:

> ...not being allowed to share the penis in coitus with the father, or thereby to obtain a baby that reactivates the girl's early wish to possess a penis of her own... it is this privation that is primarily the unendurable situation, the reason being that it is tantamount to the fundamental dread of aphanisis. Guilt, and the building-up of the super-ego, is... the first and invariable defense against the unendurable privation. (p. 466)

Based on this conflict Jones believes that either the father or femininity (and the vagina) must be renounced. It is only when the second course is taken that the bond with the father, converted to identification, results in a "penis complex." He notes that this is the identical dilemma faced by the boy: "...faced with aphanisis as the result of inevitable privation, they must renounce either their sex or their incest" (p. 466). Thus, Freud's phallic stage is probably a secondary, defensive construction, an idea to be picked up by later theorists (see below).

In a later paper Jones (1933) follows up some of these ideas. He believes that Freud's phallic phase should actually be divided into two, which he calls the "proto-phallic" phase and the "deutero-phallic" phase. The protophallic phase refers to that stage of development before the

anatomical distinction between the sexes is discovered; the child assumes that everyone is built like him or herself. During the deutero-phallic phase, after the anatomical differences are discovered, the world is seen as being divided into "penis-possessing and castrated." He agrees with Horney that during this second phase the boy denies the existence of the vagina, and instead narcissistically concentrates on his penis. In contrast with Freud (and Deutsch, 1925), he believes that the boy does have an unconscious knowledge of the mother's vagina, but the thought of penetrating it brings the fear of castration, and as a defense against this he obliterates his impulse to penetrate (and the idea of the vagina), and moves into phallic narcissism and the belief that his mother must also have a penis. In other words, the thought that mother has a vagina is more threatening (due to castration anxiety brought about by the idea that father wants to penetrate the same opening) than the thought that she has a penis. Jones states, "If there were only male organs in the world there would be no jealous conflict and no fear of castration; the idea of the vulva must precede that of castration" (p. 7).

Finally, Jones believes that this deutero-phallic stage is a neurotic obstacle to development, and not a natural stage in it. He also disagrees with Freud that the earliest masturbation of the girl must be "phallic" and concentrated on the clitoris; he believes that there are early vaginal sensations, often accompanied by a great deal of anxiety. He also agrees with Klein (see below) that a girl's desire to have a child does not

necessarily stem from her disappointment at not having a penis.

Müller (1931) also believes that libidinal cathexis of the vaginal occurs more often than thought, and notes child observations which reveled that little girls often masturbate vaginally. She believes this this original instinctual impulse is repressed in favor of a later preference for the clitoris (although she does not discuss the motivations for this repression). It is only in these women that later frigidity and castration anxiety occur.

Brierley (1936) also believes that vaginal genital impulses often occur, and typically from a very early age. She describes case material which she believes indicates vaginal sensations during suckling, and notes that:

> Stimulation during oral frustration is liable to give vaginal activity a 'biting' character, but stimulation during satisfaction, e.g. at a climax of sucking pleasure, will favour the establishment of positively toned sucking impulses... In my opinion the only babies that are headed for normal femininity may be those whose vagina participates to some, albeit very slight, extent in happy suckling. (p. 168)

She also believes that one source of "castration anxiety" is the loss of the nipple during weaning.

Melanie Klein (1928), while professing general agreement with Freud's views, nevertheless made some significant changes. Aside from her now well-know proposition that the Oedipus complex actually begins

much earlier (less than one year old) than proposed by Freud, she also believes that the Oedipus complex is set in motion (for both sexes) by the frustrations experienced at weaning. These initial frustrations are reinforced through anal frustration during toilet training. In girls, she believes that the early oral frustrations are the initial and most important reason for the girl's turning away from her mother. The girls discovery of her lack of a penis is secondary.

Rado (1933) in agreement with Abraham, believes that women often do exhibit classic anxiety symptoms and inhibitions which are due to castration anxiety (fear of dental procedures, haircuts, etc.). He believes that in part the reason for this is due to the woman's belief in an "illusory penis," which is often the source of conversion hysteric symptoms on the body. In order to keep the fantasied "illusory penis," the girl has to give up masturbation. Furthermore, it is the fear of losing this "illusory penis" that is the wellspring of castration anxiety. He also notes (as did Lampl de Groot, 1927; Greenacre, 1953) that the time of the discovery of the penis is crucial. If it is discovered during the latency phase, then development may likely be "normal." However, if during a phase of genital activity (masturbation) she sees that, in the same location where she receives pleasure, the boy has something that is much bigger, the girl, in her concrete mode of thinking, assumes that he therefore gets more pleasure. Finally, he believes that anxiety surrounding genital masochism, due in part to the girl's association of pleasure and pain, is one of the motive

factors in the development of the "illusory penis." He states:

> The illusory penis is not a simple product of penis envy, but a *narcissistic reaction formation* of the ego, its bulwark against repressed genital masochistic impulses...Thus the economic problem in women's fear of castration is solved: it is fear that the repressed genital masochism will return from repression. (italics in original, p. 437)

Therefore, like many other theorists, he believes that castration anxiety is a product of disturbed development, and not a necessary developmental step for women. Furthermore, he agrees with those theorists who believe that the negative Oedipus complex is a secondary formation, a reaction to disappointments with the father.

Clara Thompson (1941, 1943) was one of the first psychoanalysts to expressly suggest that "penis envy" has more to do with the cultural situation of women than any biological fact (although Horney continued to move in this direction). Thompson believes that due to the tendency in western culture for women to be devalued, they tend to feel inferior to men, and are envious of men due to the reality situation. She believes that this state of affairs may lead some women to blame all of their difficulties on their gender. She concludes, "Thus it may be seen that the clinical picture of penis envy has little to do with the sexual life, except secondarily, and that it has to do with all aspects of living" (1943, p. 125).

This viewpoint was also stressed recently by Krausz (1994):

> What is decisive is that because of the whole social viewpoint of the inferior worth of women as compared

> to that of the man, the girl with her general feeling of inferiority in comparison with the boy, who feels himself to be privileged, seeks an explanation for this low valuation. She often believes she finds it in the difference of the genitals. (p. 301)[74]

He also believes that a girl could not suffer from penis envy unless she was previously envious of something else, which he believes is the boy's superior social position.

Frieda Fromm-Reichmann (1936/1995) also took up this cause. She believes that Freud's ideas about female sexuality were only correct for certain neurotic women, but did not accurately portray "normal" female development. She also argues that, while many girls do experience penis envy during the phallic phase, they do not envy the boy's penis due to a realization that their clitoris is "devalued." Instead, she believes that this envy is a "...secondary and socially determined formation of our patriarchal culture" (p. 21). She believes that the girl's envy of the boy's social status is then transformed into envy of the penis because at this age, when her thinking is concrete (see also Rado, above), the only visible reason she can find for her lesser status is that the boy has something which she does not. She also believes that this penis envy is given up when the little girl, in a desire to get a child from father like her mother did, identifies with mother and the motherly role. Finally, she believes that

[74] In this regard, Grossman & Stewart (1977) note that "penis envy" is really just a metaphor. Clinically, it can serve an "organizing effect" for clients, but not a therapeutic effect, because it can help explain certain feelings that seem unexplainable. Therefore, a woman may easily cling on to an interpretation of penis envy because it serves to explain all her feelings of depression, loss, etc., while perhaps ignoring other causes of these difficulties.

because the female genitals are hidden, the girl only learns about them gradually, through menstruation and intercourse. This may make it more difficult for the girl to initially cathect her own genitals, in comparison to the boy (a notion alluded to by Horney, as discussed above).

Primary femininity

As is evident, many of the aforementioned papers emphasized the fact that girls were not simply "little boys" as Freud believed, but were from the beginning primarily feminine, and it was only through disturbances in development that the "masculinity complex" became evident. The idea of "primary femininity" was especially emphasized by Stoller (1977). He notes that in Freud's psychology of women he leaves out the first few years of life. Stoller, however, believes that this early stage is crucially important because during this time the girl's "primary femininity" begins to develop. This comes from a number of sources, including identification with her mother, sex hormones, and parental attitudes toward the female gender. Furthermore, he believes that the wish for a child is therefore pre-oedipal, and is not due to penis envy; it is instead due to identification with mother and the mother's role.

Kleeman (1977) summarizes recent work on gender identity which demonstrates that females are "...bombarded with verbal and nonverbal messages which convey a sense of femaleness, as female is defined in that family" (p. 13). Therefore, primary femininity begins in infancy,

especially if an acceptance and celebration of femininity is communicated by the parents (a point also stressed by Blum, 1977b; Bergmann, 1995). Furthermore, he notes research which reveals that little girls do masturbate vaginally aside from clitorally. In summarizing the findings from direct child observation, he states that "Cognitive functions, learning experiences, and language are believed to be more important than Freud stressed, and penis envy and feelings of inferiority are relegated to a less universal and less *necessary* place in the onset of femininity" (italics in original, p. 23). In other words, pre-oedipal development is the most important determinant of a girl's later femininity (a point also noted by Schafer, 1974; Crowell, 1981; Tyson, 1986). Although Freud (1933/1964) acknowledged this, he never elaborated on this view.

Parens, Pollock, Stern, & Kramer (1977) describe what they believe is a another major problem in Freud's views of women, specifically regarding the entry into the Oedipus complex. They note that for boys, Freud postulates a psychobiological force, preprogrammed to emerge at the appropriate time, as the motive force in the beginning of the Oedipus complex. For girls, on the other hand, it is a narcissistic injury, a cognitive and "dynamic-experiential" event rather than a biological force. They state: "It is not likely that the preservation of the species, which has its first expression in the child's behavior and psyche during the Oedipus complex, is secured by a cognitive, affective or dynamic event" (p. 105). Furthermore, they note that child observation reveals that girls have a wish

for a baby separate from an identification with mother; it appears to be an "inborn gender characteristic." In agreement with Stoller (1977), they believe that in many girls this precedes the castration complex, suggesting that the wish for a baby is not simply a consequence of penis envy.

Furthermore, they suggest the term "first genital phase" or "protogenital phase" rather than Phallic phase because their observations have found that during this period (around age 3) "the girl's sensuality in her approach to objects, her manner, poise, and communications, her pelvic-perineal (including clitoral) masturbatory activity, all of which seem to us visibly of a *dominantly feminine* disposition..." (italics in original, p. 83). In summarizing their research they suggest that there are many different paths into the Oedipus complex for girls; the castration complex is only one route. In fact, they believe that the most powerful force pushing the girl into her Oedipus complex is a "...biological, constitutional disposition to heterosexuality..." (p. 103).

Galenson & Roiphe (1977) suggest that ideas concerning primary femininity and female castration anxiety are not mutually exclusive. In fact, they note that child observation does demonstrate that discovery of the anatomical differences is more difficult for girls than boys; girls displayed more behavioral reactions, typically interpreted as "castration reactions." However, they note that these reactions typically occur at 18 months, not later as Freud thought. They summarize the different reactions to the discovery of the anatomical differences as follows:

> ... most girls in our research sample showed an increased investment in inner fantasy life, expressed both in play and graphic representation, an elaboration of many defenses, and a change in basic mood and in masturbatory patterns, whereas the boys showed a definite tendency toward increased motor activity. (p. 49).

The also noticed that during this time girls turned with a new erotic attachment to the father, although the intensity of the castration reaction and turning to father vary greatly from girl to girl. They summarize:

> We believe that Freud's original position was partially correct in that penis envy and the feminine castration complex do exert crucial influences upon feminine development. However, these occur earlier than he had anticipated, they are closely intertwined with fears of object and anal loss, and they shape an already developing, although vague sense of femininity, stemming from early bodily and affective experiences with both parents. (p. 55)

Other sources of the castration complex and "penis envy"

Aside from those already mentioned, a number of theorists have posited other sources of penis envy rather than a simple desire to have a penis. For example, Greenacre (1950) notes that due to early genital stimulation of vagina, the girl learns that this area is associated with pleasure. Therefore, when she sees that a boy has a larger "pleasure organ," she assumes that he can get more pleasure (this was also addressed by Rado, 1933; Kestenberg, 1956).

Lerner (1977) believes that another source of penis envy stems from

the fact that parents and educators typically mislabel the female genitals by only discussing the vagina; there is usually no discussion of the vulva or clitoris. Because the vulva is pleasurable, the fact that it is not discussed or labeled leads to the sense that is is "unfeminine." Lerner therefore believes that penis envy may reflect "...the wish to validate and have 'permission' for female sexual organs, including the sensitive external genitals"-- which for boys have a name and are discussed. She notes that because the clitoris is not discussed, it leads to anxiety about the girl's sexuality and therefore the clitoris is cathected as a small penis rather than as a valid and fully feminine sexual organ. Furthermore, since it is not labeled girls may assume that parents do not approve of her touching it. She notes that in Freud's time the words vulva and clitoris were not even in the dictionary, and suggests that perhaps this was one source of his findings related to penis envy in women.

Another source of penis envy discussed by a number of theorists is the difficulty in cathecting the girl's own genitals. Kestenberg (1956) notes that females have a harder time cathecting the vagina because they can not see the "pleasure organ" as can boys. This often leads the girl to turn to a doll, or an illusory penis, which they cling to as if a penis. During this period if she discovers the vagina, the girl may believe that it is an injury or tear, leading to a denial of the vagina.

Shaw (1995c) notes that anal conflicts may also cause problems cathecting the vaginal. Due to early diffuse sensations in the genitals, and

their correlation with anal sensations, girls may sense that their genitals are dirty or smelly. Finally, Moore (1976) notes that cathexis of an organ requires a mental representation of it; this is why the clitoris is easier to cathect than the vagina.

Incorporating many of these earlier views, Wilkinson (1991) believes that penis envy may not be a desire to be a boy, but can stem from many sources and can occur at many developmental stages. Because of its psychological representation as a detachable object, the penis is easily associated with whatever anxieties are present during that developmental stage: "Through the primary-process operation of condensation, the phallus essentially represents a libidinal metaphor in which being phallic means 'to have' and being castrated means 'to not have'" (p. 341). Through displacement, penis envy can also represent a metonymic symbol for what is missing (e.g., a good enough mother, etc.). Therefore, to truly understand the meaning of penis envy in a particular case, both the metaphoric and metonymic meanings assigned to femininity must be understood. Moore (1976), in a similar vein, believes that penis envy often stems from a poor relationship with the mother:

> I would like to suggest that penis envy may represent a wish for a personal object that it gratifying- a satisfactory substitute for the deprivation of a mutually pleasurable mother-child interaction that would have resulted in a feeling of self-esteem, a worthwhile valuation of her whole feminine self, including the genitals. (p. 295).

Chasseguet-Smirgel (1970; 1976) also emphasized the importance of the mother. She believes that penis envy often stems from the girl's revolt against the mother, who caused narcissistic injury due to her omnipotence. She also notes that the female, as described by Freud, is made up of a series of "lacks" (lack of penis, lack of vaginal awareness, etc.) while the primary maternal imago, as depicted in dreams, clinical material, and even myths, is the opposite; she is the possessor of all (see also Serebriany, 1976). Chasseguet-Smirgel believes that this opposition stems from the fact that this diminution of the mother eradicates the narcissistic wound that all humanity feels due to their helplessness as infants, when they are completely dependent on mother[75]: "My experiences with women patients has shown me that penis envy is not an end in itself, but rather the expression of a desire to triumph over the omnipotent primal mother through the possession of the organ the mother lacks..." (p. 285).

Finally, Lax (1995) notes the importance of the negative Oedipal phase. During this time, when the girl's erotic desires are tied to the mother, penis envy may result because the little boy has and can give to mother what the little girl lacks (a point also raised by Laufer, 1986). Therefore, the girl assumes that mother will prefer the boy (see also Menninger, 1936). Furthermore, the girl also envies the father's relationship with mother; therefore, penis envy is based on the dyadic love feelings of the little girl for her mother. Lax believes that this is the

[75] In this regard, it is interesting that Freud, with his emphasis on the importance of early experience, did not discuss in any great detail mothering or motherhood (Schafer, 1974; Kaplan, 1993). This would be left to later analysts (e.g., Deutsch, 1945; Winnicott, 1957; 1987).

source of her depression during this phase; and can lead to the girl's turning to the father, as a defensive turning of a passive experience (mother leaving for father) into an active one (girl leaving for father).

Female genital anxiety and vaginal awareness

As has been hinted at in a number of papers discussed thusfar, many theorists believe that Freud was incorrect when he posited that girls (and boys) remain "unaware" of the vagina until puberty. Chasseguet-Smirgel (1976; see also Jones, above) suggests that in many cases the boy's denial of the vaginal could be a defense. She also notes a problem in Freud's reasoning in this regard:

> ... it is striking that the wishes for penetration by the father's penis were active in the Wolf Man's case when he observed the parental coitus (at the age of one and a half)... and yet the same wish for penetration arises in the girls' case only in puberty. The Wolf Man, like Schreber... wished to have a child by his father, an instinctual wish tied to his feminine identification, while the girl's wish is only a substitute for, an ersatz version of, her penis envy. (p. 280).

She also suggests that if the boy lacked any knowledge of the vagina, he would have little reason to envy the father, because his "capabilities" would be about the same as his father's (i.e., there would be less reason to compare his penis to his father's). Torsti (1994) states that "It is astounding that the significance of the vagina has been ignored by theorists in outlining the development of femininity in classic psychoanalytic theory.

How is it possible for human beings to possess an organ which becomes sensitized only at puberty?" (p. 473).

This new viewpoint, which, as initially suggested by Horney (see above), reveals that the girl is not simply "a little man", and instead cathects her own genitals, leads to the possibility of anxiety related to her own genitals (rather than anxiety about a lack of genitals-- the penis). Lerner (1980) suggests that it is not the perceived superiority of the penis that leads to penis envy, but rather the anxiety-provoking nature of the girl's own genitals. This anxiety is part stems from her difficulty in "arriving at an accurate, comfortable, and differentiated appreciation of her sexual anatomy." Therefore, the girl may think that her intrapsychic life would be easier if she had a penis.

Mayer (1985) notes the overemphasis in classical psychoanalysis on what the boy has that the girl does not have. She believes that there has been an equal underemphasis on the girl's reaction to what the boy does not have, which is what she believes to be the source of what she calls "true female castration anxiety." While acknowledging the importance of the more traditional "phallic castration complex," she suggests that young girls are aware of their "opening," and cites clinical evidence that women often believe that men have been "closed over" genitally. Therefore, men represent that such a thing could happen to them, especially due to forbidden Oedipal wishes. She notes that one of the secondary meanings of castrate is "to deprive of the ovaries, to spay" (p. 341). Therefore, penis

envy may in part be a defense against anxiety about her own genitals. Chehrazi (1986) agrees, and suggests that some of this anxiety stems from a fear of injury from the "large" paternal penis. She therefore suggests that the "phallic phase" is more accurately describes as the "genital phase."

In a similar vein, a recent paper by Kaplan (1994) suggests that some of the difficulties in understanding female castration anxiety stem from Freud's initial confusion of fantasy and actuality. She believes that a fantasy about a "lack" can often serve as a screen for a "presence" that arouses a more threatening anxiety, a notion already discussed by some other theorists. Specifically, she believes that female castration anxiety does not relate to the lack of a penis, but is instead related to the fear of mutilation of her own (female) genitals (Jacobson (1937/1976) also noted that if the vagina is fully valued, then there is true "castration fear"-- a fear of injury to her own genital). Kaplan notes that:

> For the female child, an imagined castration entails a destruction or mutilation of her inner genitals. And since these inner genitals are not observable, palpable, or easily locatable, the experience of castration anxiety generalizes to the entire inside of the body and surface of the body as well. (p. 482)

Furthermore, she believes that a crucial motive inhibiting the girl's aggressive rivalry with the mother and her erotic strivings toward the father is this castration anxiety related to her own genitals. She concludes that the "fear of loss" noted in many women is actually a screen for this more threatening castration anxiety, "... a fear of bodily damage that is

diffuse, unlocatable, and which, therefore, involves not only a vast and enigmatic inner genital world, but her entire being" (p. 488).

Mayer (1995) also notes the lack of emphasis on the girl's experience with "what they do have." She suggests that before there is any realization of the anatomical differences between boys and girls, girls have already begun to form some identity with their genitals. She also notes (as have others) that "genital anxiety" may be a better term for females, as "castration" anxiety has come to stand for only the loss of the penis. She suggests that this genital anxiety is anxiety about losing specifically female capacities for gratification, a notion similar to that of Jones (1933). In this regard, she proposes two developmental lines (primary femininity, and the phallic castration complex), both of which may be influenced by the castration complex. She summarizes as follows:

> The idea that boys have something precious which a girl imagines she once had is a fantasy based on what she isn't. The idea that she herself possess something precious which, precisely because it is precious, is in danger of damage or loss, is an idea based on the girl's experience of what she is. (p. 32)

Different cultural situation

A number of theorists have noted that women lived in a vastly different world when Freud was writing compared to today. As but a few examples, Schafer (1974) wonders whether the society Freud lived in almost "guaranteed" that women turned out as Freud said they would (Schafer also summarizes the tradition within which Freud worked, and

how it influenced his writings on female sexuality). Blum (1977b) and Jacobson (1937/1976) suggest that Freud's views reflect the women of the time, but that now, with emancipation, women's liberation, etc., women are different psychologically than they were them. Finally, Gillespie (1975) notes that today the discovery of the anatomical differences is probably not as traumatic as during Freud's time, because infants and very young children today often see children of the opposite sex, which was typically prohibited during Freud's time.

Summary

In summary, the main revisions of Freud's views include the following: 1) that the castration complex and penis envy are not normal developmental phases, but are do to problems in development; 2) that "penis envy" does not necessarily originate in a desire for a penis, but is instead a defensive reaction to anxieties associated with the vagina (typically anxieties stemming from Oedipal wishes); 3) that "penis envy" is not biologically determined, but is instead more a product of the culture, family attitudes, etc.; 4) that before the castration complex sets in girls go through a stage of "primary femininity," during which there are vaginal sensations and pleasure in the female genitals, as well as identifications with mother and the motherly role; and 5) that there are many sources for penis envy, and many ways to interpret it.[76]

[76] See Chehrazi (1986) for a table which summarizes the differences between the "early" and more recent views on female sexuality.

In essence, then, many of the revisionists do not disagree with some of the clinical phenomenon Freud was describing, but they disagree with the interpretation of what these phenomena mean. For Freud, penis envy was the "bedrock" for women; there was nothing left to interpret (1937/1964). As many of the theorists above have noted, however, there appear to be many interpretations of the meaning of penis envy and the castration complex, for both males and females, and a simplified notion as to what these phenomenon mean can lead to theoretical and clinical difficulties.

APPENDIX D

Entrée Points

Indicators of anxiety

"I noticed you shifted in your chair"

"I noticed you sighed"

"I noticed you opened your eyes"

Manifestations of resistance

"I noticed you've been silent for quite some time now"

"I notice that you broke off that thought in mid sentence"

Symptoms

"Can you describe the pain in your head in more detail"

"I notice your fist is clenched"

Use of non-denotative words

"You said upset, can you tell me more about that"

Other probes to use

"What's in your mind's eye now"

"Can you describe that in greater detail"

"Just keep on describing everything, no matter how trivial"

"Can you get an image of that"

APPENDIX E

Scale for Scoring Graphic Behaviors on Projective Drawings

This appendix describes the scoring criteria for the ten graphic indices of anxiety by which each drawing was rated in this study. The original source of these scoring procedures was Handler's (1967) scoring manual for human figure drawings, and Roach's (1981) scoring manual for the automobile drawing. Handler's manual contained twenty different figure drawing indices of anxiety while Roach's manual included twelve. Hamernik (1985) used Handler's and Roach's scoring manual with modifications which have been applied to this study. The seven anatomical regions of the human figure drawing identified by Handler were expanded to eleven. The five regions of the automobile drawing identified by Roach were expanded to thirteen to more closely parallel the human figure scoring manual. In addition, Hamernik drew upon research by Roach and expanded the scoring range from 0-3 to 0-5. All of the indices were selected because of previous research; as discussed in the introduction, four of these indicators have been grouped into Egoistic Graphic Behaviors (EGBs-- erasure, shading, emphasis lines, and reinforcement), and the remaining six indices are referred to as Standard Graphic Indices (SGIs-- transparencies, vertical imbalance, light line-heavy line, omissions, line discontinuity, and detail [detail loss]).

The scoring procedures in this study differ in some respects from those of Handler and Roach , but were applied as described by Hamernik (1985) and incorporated by Tobias (1993). Each alteration was done on the basis of previous research, and with the purpose of increasing the correspondence between scoring schemes for the human figure and the automobile. The scoring procedures in this study are identical to those in Tobias (1993) with a few modifications, which are noted following the drawing variable which has been modified. This scale used the following list of human and automobile "body" parts:

HUMAN BODY PARTS

1. head (including eyes, nose, mouth, ears, and eyebrows)
2. neck
3. one or both hands
4. one or both feet
5. one or both legs
6. one or both arms
7. chest
8. pelvic area
9. buttocks
10. shoulders
11. breasts (adult female)

AUTOMOBILE BODY PARTS
1. door(s)
2. front window
3. back window
4. side window(s)
5. tires
6. hood
7. trunk
8. door handle(s)
9. front bumper
10. back bumper
11. headlight(s)
12. taillight(s)
13. roof (except convertible)

Egoistic Graphic Behaviors (EGBs)

I. REINFORCEMENT

Reinforcement is the retracing of lines (lines that have been redrawn or gone over), going over lines that makes them typically darker, or bolder looking. It can also be thought of as perseveration. Reinforcement is not scored when sketchiness of line is seen, nor is it scored when a line is erased and redrawn with a single line. This does not include shading, which is scored separately.

SCORE: Percentage of drawing that is reinforced.

0 if no part of the figure is reinforced.

1 if less than a quarter of the figure is reinforced.

2 if about a quarter of the figure is reinforced.

3 if about half of the figure is reinforced.

4 if about three-quarters of the figure is reinforced.

5 if all or almost all of the figure is reinforced.

II. SHADING

Shading is scored as any design or coloring on clothing or skin. Cross-hatching or any consistent pattern or lines is scored as shading. Facial markings which indicate the presence of a beard, tattoo, etc. are scored as shading. Exhaust smoke and beams of light are both scored as shading on the automobile. Human hair is not scored as shading (except for beard or moustache, or eyebrows).

SCORE: Number of body parts that display shading

0 when there is NO shading.

1 when there is shading on any one (1) body part.

2 when there is shading on any two (2) body parts.

3 when there is shading on any three (3) body parts.

4 when there is shading on any four (4) body parts.

5 when there is shading on any five (5) or more body parts.

III. ERASURE

Any body part which has been erased and not redrawn, or erased and redrawn regardless of any change in size and/or placement, is scored. For large scale erasures, all parts which have been effected (corrected or redrawn or not) are scored. Lines which separate or connect two different body parts are scored as each having been erased/changed/corrected. Stray lines (lines outside of the main drawing) which have been erased are not scored.

SCORE: Number of body parts on which erasure occurs:

0 when there is NO erasure.

1 when there is erasure on any one (1) body part.

2 when there is erasure on any two (2) body parts.

3 when there is erasure on any three (3) body parts.

4 when there is erasure on any four (4) body parts.

5 when there is erasure on any five (5) or more body parts.

IV. EMPHASIS LINE

This index should not be confused with shading. Emphasis Line refers to a line or series of lines drawn to emphasize specific body areas, and which may give the figure a three dimensional appearance. In other words, they help to make the drawing better. Thus, while cross-hatching drawn on a skirt is scored as shading, lines indicating pleats or hoop skirts would be scored as Emphasis Line. Also, while a beard or moustache are scored as shading, lines drawn to indicate a dimple, facial crease or fold, chin, cheekbone, furrow in the forehead, etc. are scored as Emphasis Line. Simple lines are sufficient for indicating the presence of breasts. For emphasis lines to be scored the breasts require additional lines which may enhance the way breast are drawn and which may provide three dimensional detail.

SCORE: Number of body parts which include emphasis lines.

0 when NO emphasis lines are present.

1 when one (1) emphasis line is present.

2 when two (2) emphasis lines are present.

3 when three (3) emphasis lines are present.

4 when four (4) emphasis lines are present.

5 when five (5) or more emphasis lines are present.

These four scores are then summed to create the EGB score for each drawing.

Standard Graphic Indicators (SGIs)

I. TRANSPARENCY

Transparency is scored when a body area which ordinarily would not show through clothing or through another body area placed in front of it is visible (e.g., legs showing through skirt or trousers, body showing through arm area). Scoring occurs when any segment of a body part (or whole body part) is drawn when it would typically be hidden from view.

SCORE: Number of body parts through which a transparency occurs .

O when there are NO transparencies in the drawing.

1 when one (1) transparency is present.

2 when two (2) transparencies are present.

3 when three (3) transparencies are present.

4 when four (4) transparencies are present.

5 when five (5) or more transparencies are present.

II. VERTICAL IMBALANCE

This index is scored with a protractor, as the angle the midline of the figure makes with the bottom edge of the paper. For the automobile, the horizontal line follows the bottom edge of the auto, and the vertical line intersects the midpoint between the tires.

SCORE: Number of whole degrees, truncated to whole numbers, i.e., an angle of 15.5 degrees is scored as 15.

O when the deviation is less than or equal to two (2) degrees.

1 when the deviation is greater than two (2) degrees, but less than or equal to six (6) degrees.

2 when the deviation is greater than six (6) degrees, but less than or equal to ten (10) degrees.

3 when the deviation is greater than ten (10) degrees, but less than or equal to fourteen (14) degrees.

4 when the deviation is greater than fourteen (14) degrees, but less than or equal to eighteen (18) degrees.

5 when the deviation is greater than eighteen (18) degrees.

III. LIGHT LINE-HEAVY LINE

The line quality of a drawing is scored according to the predominant (encompassing more than half of the drawing) type of line employed. The number of overlays are counted and scored when the figure/automobile cannot be identified. Overlays consisted of MEADACADEMIE tracing paper. The light source used throughout the scoring procedure was a 100 watt bulb in a desk lamp, positioned 12

inches above the drawing. Unlike in the Tobias (1993) study, in this study higher scores were given to both light line and heavy line. This is in keeping with previous research, as summarized by Handler and Reyher (1965), which has found that both light line and heavy line are indicators of anxiety.

SCORE: Number of overlays required for drawing to be obscured.

O if more than half of the drawing is lost with 7 overlays.

1 if more than half of the drawing is lost with 8 or 6 overlays.

2 if more than half of the drawing is lost with 9 or 5 overlays.

3 if more than half of the drawing is lost with 10 or 4 overlays.

4 if more than half of the drawing is lost with 11 or 3 overlays.

5 if more than half of the drawing is lost with 12 or 2 overlays.

IV. OMISSION

Score if there is an omission of any essential body parts or when the figure is placed so that one or more essential body part has been cut off by the edge of the paper (paper chopping). The list of body areas is expanded to include the necessary facial features of eyes (both for front view, only one for side view), nose, mouth, ears, and eyebrows. The absence of each is to be scored unless the way it is has been drawn would naturally eliminate it (i.e., a ski or surgical mask, or long hair covering facial features.). If arms or legs are omitted, then hands and feet are also scored as omitted. If legs come to points, they are counted as omitted unless toes or shoes are indicated. A hand is considered as omitted unless fingers are suggested. In case of clenched fist, then lines must indicate that fingers are present. Eyes do not have to be drawn in detail. Drawings of symbols of gender are scored as all body parts as having been omitted. If a profile is drawn, do not score as omitted parts that would not obviously be seen in a profile view.

SCORE: Number of body parts which have been omitted.

O when there are NO omissions.

1 when any one (1) body part is omitted.

2 when any two (2) body parts are omitted.

3 when any three (3) body parts are omitted.

4 when any four (4) body parts are omitted.

5 when any five (5) or more body parts are omitted.

V. LINE DISCONTINUITY

Line Discontinuity refers to the frequency of broken lines used in the drawing, and to the spaces left between various body parts. On very close inspection these body parts may appear to be unconnected. A line discontinuity is scored if it is possible to go from the outside of the body wall to the inside of the body wall without crossing a body line.

Line Discontinuity is difficult to score when the figure is drawn using a sketchy line. It should not be scored, if despite the sketchiness, it is impossible to go from the outside of the body wall to the inside without crossing a body line.

SCORE: Number of Discontinuities present in a figure drawing.

0 when there are no more than three line discontinuities in a drawing.

1 when there are four or five (4-5) line discontinuities in a drawing.

2 when there are six or seven (6-7) line discontinuities in a drawing.

3 when there are eight or nine (8-9) line discontinuities in a drawing.

4 when there are ten or eleven (10-11) line discontinuities in a drawing.

5 when there are twelve (12) or more discontinuities in a drawing.

VI. DETAILS (DETAIL LOSS)

Detail Loss is scored for presence or absence of any item not scored for Omission (e.g., items such as pockets, buttons, fingernails, collar, tie, etc.). Detail Loss is best scored when two drawings done by the same artist are placed side by side. However, Detail Loss may be adapted to the scoring of a single drawing by constructing a list of body details and matching the drawings against this list. In contrast, the Omission variable includes essential body areas (e.g., arms, legs, hands, head, etc.) while Detail Loss include only the enhancements or accessories added by the artist not essential to completing the task demand to draw.

List of Details:

Human Figure Details:

body details: fingernails, toenails

hair details: beard, moustache, eyebrows side burns, chest hair, genital hair, underarm hair, arm hair, leg hair.

clothing details: collar or neckline, breast pocket, sleeve cuffs, tie or buttons, pants pocket, zipper, shoelaces, pant cuffs, belt, belt buckle, shirt insignia, number/letter on shirt.

jewelry details: necklace or chain, watch or bracelet, anklet, glasses, earrings, cuff links, broach, tie tack or pin.

Automobile Details:

interior detail: steering wheel, driver, passengers, seats, dashboard.

exterior detail: tire lettering, wide tires, white walls, treads, hubcaps, pin stripping, color changes (two tone painting), extra headlights (two or more), door locks, body side molding, hood ornament, truck lock, rear bumper hitch, roof or trunk baggage carriers, turbo tube/inlets, vents, radio antenna, speed lines, exhaust pipe/exhaust fume lines.

SCORE: Score the number of additional details included, not omitted.

O when there are 16 or more additional details.

1 when there are thirteen to fifteen (13-15) additional details.

2 when there are ten to twelve (10-12) additional details.

3 when there are seven to nine (7-9) additional details.

4 when there are for to six (4-6) additional details.

5 when there are zero to three (0-3) or more additional details.

APPENDIX F

Hammer's (1953) Phallic and Castration Scales

PHALLIC

20. Phallic depiction of the whole body: That is, the head and body joined into one mass with the neck omitted, or the head of the person shaped like the head of the penis and the body shaped like the shaft.
21. Phallic head: The head of phallic shape with the ears either omitted entirely or placed within the outline of the head rather than protruding from it.
25. Nose phallic in shape, elongated or enlarged.
27. Pipe, cigarette or cigar in mouth.
28. Visor added to the hat, elongated and in stiff upward position.
29. Phallic-like and erect hat earflaps standing out from side of head.
31. Ears excessively large, phallic in shape and standing out from side of head.
32. Tie emphasis, elongated or presented as standing erect and away from shirt front.
33. Phallic arms: Arms drawn more phallic-like than arm-like.
33b. Phallic legs: Legs drawn more phallic-like than leg-like.
36b. Extra fingers.
38. Walking-cane or stick present.
39. Frank representation of primary genitals: This item ranges from a depiction of the pubic hair to a drawing of the penis or vulva.
43. Feet excessively elongated or presented as rigid and erect, standing out and up at an angle away from the ground.
44. Emphasis on fly of the pants.

CASTRATION

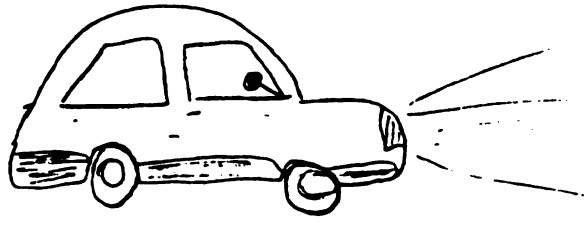
22. Head cut off from the body at the neck or else displaced horizontally so that it seems to grow out of the shoulder, in either case giving a distinct impression of decapitation.
23. Head tilted to either side: At a distant angle from the body line.
24. No hair depicted in any way.
26. Nose drawn as if broken or bent in two.
30. Ears omitted.
34. Short, stumpy arms: Arms less than the length of the trunk.
35. Unattached arms: Arms cut through and unattached to body or else presented as barely attached, as if hanging by a thread.
36. Absence of one or more fingers.
37. No hands: Arms presented as intact from shoulder to wrist with amputation effects presented at that point.
37b. No feet: Legs presented as intact from the hip to the ankle with amputation effect presented at that point.
37c. No legs drawn.
40. Pelvic closure-line omitted. Unclosed genital area or no line connecting the inner aspects of the legs to each other or to the trunk.
41. Excessively short legs: Legs smaller in length than the body.
42. Unattached legs or feet: Legs not connected to the body, or feet not connected to the legs.

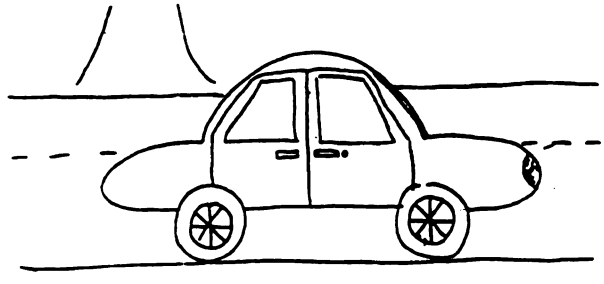
The final score for each scale is simple the number of scorable categories applicable on a drawing. So, if a drawing is scorable on numbers' 20 and 39, the Phallic score would be 2.

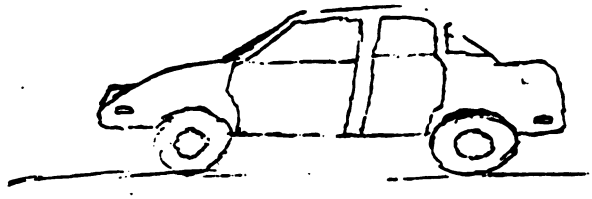
APPENDIX G

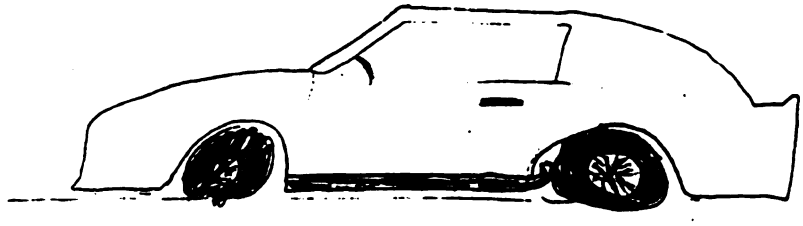
Examples of Automobile Drawing Scores

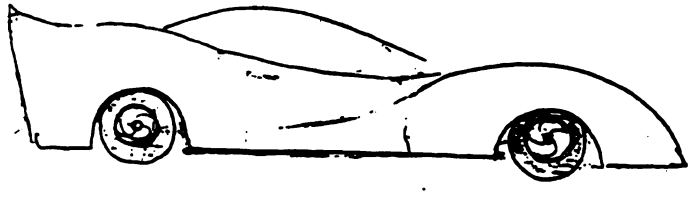
The following five auto drawings are arranged from the lowest AUTO score (top of page) to the highest (bottom of page).











APPENDIX H

Analogic Replication Scale

A. ARSm (male genitalia)

1. Pubic Hair-- bushes, woods, grass, course or curly hair
2. Penis--
    a. Linear aspect-- elongated, straight, hooded or capped object
    b. Orientation-- upright, protruding, standing up, anything that can rise or elongate, defies gravity
    c. Hardness
    d. Penetrating object
    e. Surface texture-- smooth, polished, shiny
    f. Capable of emitting, flowing
    g. Machinery or tools
3. Testicles-- two objects in proximity, balls, rocks
4. Scrotum-- sack, bag, something suspended, orange peel
5. Three objects or the number 3
6. Symbolic equivalents (reptiles, hats, overcoats, feet)
7. Configuration (weighted 3)-- larger object flanked by two smaller objects

B. ARSf (female genitalia)

1. Pubic Hair-- bushes, woods, grass, course or curly hair
2. Clitoris
    a. Linear aspect-- round, lump, pebble
    b. Smaller in size-- toy, peg, "little"
3. Vagina-- hole, path, river, valley, road, cave, hollow objects, entrance, window, door, something which can enclose or be entered or penetrated
4. Labia-- embankments, folds, mounds, rolling hills, ridges, lips
5. Surface texture-- wet, slippery
6. Symbolic equivalents (fruit, house, landscape, shoes, flowers)
7. Configuration (weighted as 3)-- hole flanked by embankments and crested by an object (although the hole is not always necessary to score this)

The final score for each ARS is simply the number of applicable subscores, with the 7th subscore receiving a weight of 3.

APPENDIX I

REMOTE Scale

This scale allows the investigator to score the remoteness/blatancy of the substitutive vehicle of gratification coded in the ARS scale (see Appendix H). The imager's body, especially those with sensitive tactile qualities and mucous membranes provide the most effective analogues of the genitals. The score is the lowest applicable category.

EE. Erotogenic anatomical equivalents
- Penis/clitoris (P or C)
  - a. Tongue
  - b. Nose
  - c . Uvula
  - d. Other
- Vagina (V)
  - a. Anus
  - b. Mouth
  - c. Lips
  - d. Other
- Scoring: score 1 for human and 2 for animal

AE. Anatomical equivalents - lack erogenous zones
- Penis/clitoris (P or C)
  - a. Finger
  - b. Hand
  - c. Arm
  - d. Toe
  - e. Foot
  - f. Leg
  - g. Head
  - h. Other body part
- Vagina (V)
  - a. Ear holes
  - b. Nostrils
  - c. Other
- Scoring: score 3 for human and 4 for animal (plants also scored 4)

Man-made things (Scoring begins with "5")
- 5. Machines
- 6. Structures, i.e., buildings, bridges, roads, vase
- 7. Fabricated objects, i.e., clothing, cinderblocks
- 8. Products, i.e., oil, paste, jello, iron kitchen wares

Inanimate objects
- 9. Inanimate (natural) processes, i.e., tornado, lightning
- 10. Inanimate (natural) material, i.e., rocks, water, earth
- 11. Geometrical forms

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APPENDIX J

Object Function Scale

OFSp (penetrating)

Anything which can enter into, pass through, move towards, shoot (e.g., keys, cars, trains, gun, etc.)

OFSe (encapsulating)

Anything which can be entered, take things in, hold things (e.g., purse, vase, house, etc.)

OFSc (castrating)

Anything which can cut, hurt; something broken (e.g., knife, weapon, broken tree limb, etc.)

The degree of topographic resemblance to each category is scaled as follows:

0-- No similarity

1-- Minimal similarity

2-- Intermediate

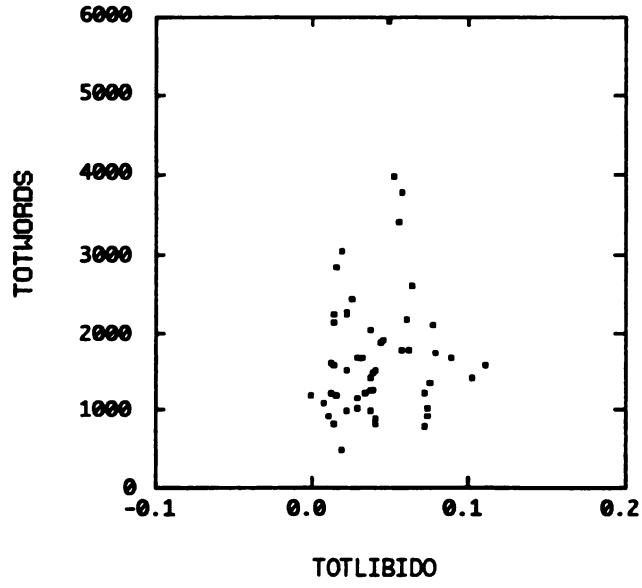
3-- Isomorphism/Identity

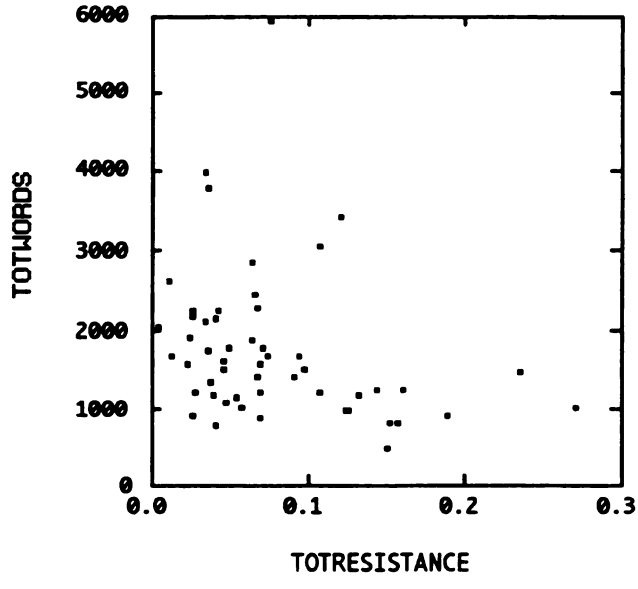
APPENDIX K

Figure 1

Scatterplot of WORDS and LIBIDO, and WORDS and RESISTANCE

(for both genders; all stimulus objects combined)





APPENDIX L

LIBIDO Score from Holt's (1970) Scale for Scoring Primary Process[77]

LEVEL 1

L1O. Oral Receptive
(3) a. sucking, nursing
(3) b. breasts (seen in isolation or unclothed)
(2) c. mouth, lips, tongue, jaw (in isolation)
(3) d. famine, drought, starving, lack of food (2)
(3) e. nausea, vomit

L1O-Ag. Oral Aggressive
(4) a. cannibalism
(4) b. castrative or sadistic biting
(3) c. parasites
(2) d. teeth, jaws (in isolation)

L1A. Anal
(4) a. excretory organs, defecation, feces
(3) b. buttocks (in isolation)

L1S. Sexual
(4) a. genitalia
(4) b. phallic or female symbol
(4) c. semen, sperm, ejaculation
(4) d. references to the sexual act

L1E-V. Exhibitionistic-Voyeuristic
(3) a. nudity
(3) b. pornography
(3) c. explicit voyeurism or exhibitionism

L1H. Homosexual
(5) a. overt homosexual acts
(4) b. less blatant homosexual acts (kissing)
(4) c. uncertainty or ambiguity about gender
(4) d. hermaphrodites (male and female characteristics)

L1M. Miscellaneous
(4) a. menstruation
(3) b. birth (visualization of the process)
(3) c. contraceptives
(3) d. urine, urination (as a concrete process)

[77] The number in parenthesis is the "Defense Demand" score for each response.

LEVEL 2

L2O. Oral Receptive
(3) a. breasts (seen as part of a person)
(2) b. mouth, lips, tongue etc. (as part of figure)
(2) c. stomach
(2) d. kissing
(2) e. intoxicated people, drug use
(1) f. pigs, hogs
(1) g. smoking
(1) h. eating or drinking (and attempts to get food)
(1) i. cooking
(1) j. food (hunger)
(1) k. containers for food, drink (also utensils)
(1) l. hunger, appetite
(1) m. persons with oral social role (gourmet, waiter)

L2O-Ag. Oral Aggressive
(3) a. poison
(2,3) b. biting, chewing (or aggressive sucking)
(2) c. teeth, jaws, beak (part of a face)
(2) d. shark, mosquito (all animals that bite, if teeth mentioned or mouth open)
(2) e. verbal aggression (cursing, arguing, etc.)
(2) f. spitting

L2A. Anal
(3) a. buttocks (as part of a figure)
(2) b. intestines
(2) c. sewer, toilet, bathroom
(1) d. tail, back end of animal
(1) e. disgust, foul odors
(1) f. mud, dirt, smear, filth
(3) g. suppository, proctoscopes

L2S. Sexual
(3) a. breasts
(2,1) b. kissing
(1) c. love, marriage, romance, dating, wedding rings, wanting to meet someone (in a sexual sense)
(1) d. virginity
(1) e. valentine heart, Cupid
(1) f. stamen, pistil
(1) g. abstract genitality (procreation)
(1) h. legs (in a sexual sense)

L2E-V. Exhibitionistic-Voyeuristic
(3) a. underwear, partial nudity
(2) b. peering, peeking etc., looking (emphasized)
(2) c. eyes (strongly emphasized)
(1,2) d. strange, unusual views (looking emph.)
(1) e. eyes (when not emphasized; either in isolation, or if the act of looking is emphasized)
(1) f. performing, acting, showing off, actors, stage, theater, movies (putting self on display)
(1) g. masks
(1) h. deliberate concealment, hiding

L2H. Homosexual
(3) a. transvestism
(2) b. sublimated homosexual acts (holding hands)
(2) c. uncertainty or ambiguity about gender (slips of the tongue, etc.)
(2) d. contradictory descriptions (both male and female characteristics)

L2M. Miscellaneous
(3) a. internal sexual anatomy (uterus, etc.)
(3) b. embryos or fetus
(3) c. pregnancy, childbirth
(2) d. bladder, concept of urination
(2) e. narcissism (admiration of self, looking in mirror)

APPENDIX M

REMOTE IMAGERY AND COVERT Score

(adapted from Holt's [1970] Scale for Scoring Primary Process)

REMOTE IMAGERY scale (the number in parentheses is the weight assigned)

1) R-eth: person is from different ethnic group (from participant)
1) R-pers: scorable material expressed through someone else (not the participant)
1) R-pers-H: actions of others directed to participant
1) R-pers-O: action directed by another toward another
2) R-gen: feeling or act is lacking genuineness
3) R-con: action in conditional tense ("might", "could")
3) R-geo: action takes place outside of U.S., people from outside U.S., etc.
3) R-rel: religious context or character
3) R-fig: use of figures of speech (metaphor, simile)
3) R-cond: score if drive is "iffy" or conditional ("it almost looks like")
4) R-fan: characters or context from fantasy, dreams, etc.
4) R-dep: drive activity is depicted in art, TV, etc.
4) R-time: past or future
4) R-fic: reference to fictional character, or if material is expressed in terms of a story
5) R-an: actors are animals
6) R-(an): actors are sub-mammilian animals
7) R-pl: actors are plants
8) R-ia: inanimate objects are the actors, no persons or animals

Context (add 1 to the Remote score for each applicable category)

Cx C (cultural context): reference to custom, ritual, folklore, social role, etc.
Cx E (esthetic context): expressed in the arts
Cx I (intellectual context): seen as scientific, technical, intellectualized
Cx H (humorous context): drive put in a humorous context

Furthermore, if the actor describes a drive activity which they themselves do, the REMOTE IMAGERY score is 0. If the drive is scored as a potential on the overtness scale, it is given a REMOTE IMAGERY score of 2. The final REMOTE IMAGERY score is the sum of the weights of all applicable categories.

COVERT scale

(4) O-pot: drive is expressed only as a potential (e.g., score for "breast" "mouth" etc., which imply the potential for oral activity)
(3) O-exp: drive is experienced as a wish, feeling (but no action taken)
(2) O-vbl: drive is expressed in verbal activity
(1) O-beh: drive is expressed in behavior

The score is the number in parentheses.

APPENDIX N

CASTRATION IMAGERY Scale (adapted from Schwartz, 1955)

I. Genital Injury or Loss

1. Castration or gross loss of the genitalia.
2. Total mutilative destruction of the body—i.e. death where specified or clearly inferable as mutilative: e.g. auto accident, bomb explosion, tortured to death, etc.
3. Injury or gross physical damage to the genitalia.
4. Loss of the genitals through surgery.
5. Partial loss of the genitals through surgery.
6. Surgical operations upon the genitals, not involving loss or removal.

II. Damage to or Loss of Other Parts of the Body

1. Loss of, or injury to common symbolic equivalents of the genitalia:
   a. nose
   b. eyes
   c. arms and/or fingers
   d. genito-urinary apparatus and/or lower abdomen
   e. lungs
2. Surgical operations upon above (1).
3. Loss of, operations upon, or damage to other parts of the body.
4. Loss of part, damage to, or operations upon body, without further specification.
5. Torture.
6. Ritual scarification, except where this can be subsumed under Part 1,above, as damage to the genitalia.
7. Tattooing, where the story has the clear implication of this being a painful, damaging, or punitive measure
8. Pain, hurt, or blood, any mention thereof or spontaneous denial or avoidance. Rape is included here.
9. Beating or clear implication of injury
10. Illness, and death as consequence of illness.

III. Damage to or Loss of Extensions of the Body Image

1. Destruction of, loss of, or damage to non-bodily symbolic equivalents of the genitalia:
   a. machinery, instruments
   b. weapons, particularly guns
   c. cameras or other optical instruments or equipment
2. Above, (1), but involving more general extensions of the body image:
   a. automobiles
   b. clothing
3. Destruction of, loss of, or damage to possessions. Possessions include animals and pets.

IV. Sexual Inadequacy

Here, special care must be taken to score spontaneous denials.

1. Impotence, sterility: behavioral, or fear, anticipation or expectation of
2. Phallic inadequacy: penis too small, ejaculatio praecox, 'inability to satisfy the sex partner': behavioral, or fear, anticipation, or expectation of
3. Lack of prowess in sexual activities, without further specification.

4. Description of hero as having chronically unsatisfied sexual longings.
5. Renunciation of sexuality, own sexual longings or urges.
6. Withdrawal in the face of heterosexual stimulation, inability to carry through to logical conclusion in situation of sexual stimulation.
7. Inability of hero to marry, but only to assume casual sexual relationship.
8. Equation of sexuality with aggression: mention of rape or violent possession of woman as means of sexual gratification, intercourse-death sequence, damages or hurts sex partner,etc.
9. Repeated emphasis on foreplay, preliminary stages of love making, touching, petting, etc. Usually occurs with #6, inability to carry through to logical conclusion.
10. Description of women in stories as low, immoral, prostitutes, seducers, etc.
11. Description of women as phallic—either directly symbolic, i.e. witches, possessing arms, etc.or as dominating and capable of hurting hero.

VIII. Extrapsychic Threat

1. Parental punishment, nature specified or unspecified, unless this may be subsumed under one of the prior parts of the measure:
   a. for behavior
   b. for fantasy, longings, or temptation
   c. without specification
2. Authority figure-parental surrogate punishment (as above).
3. Violence or threat directed against hero from other external personal sources.
   a. when juxtaposed with any sexual or aggressive element (the participant need not specify causality)
   b. without mention of sexual or aggressive antecedents
4. Death or destruction of hero, when 'adventitious'.
5. Impersonal threat: war, pestilence, accident, flood, earthquake, etc. (deprivation of necessities of life and famine are specifically *excluded).*
6. Parental or parent-surrogate or authority figure prohibition, domination, or opposition to desires of hero re: sex, aggression, adventures, freedom, fuller life, escape, etc.
7. Societal scorn, ostracism, etc.
8. Pregnancy as consequence of illicit love; also, conception of pregnancy as difficult, dangerous, etc.; also, conception of child or woman as somehow injured or damaged. This is essentially a conception of pregnancy as punishment for forbidden sexuality. Included here also is being forced to marry as consequence of sexual activity.
9. For female characters in stories, becoming a prostitute in consequence of sexual misbehavior; For male characters, becoming a bum, drifter, hobo, or criminal or losing class status.

The final score is simply the number of applicable categories.

APPENDIX O

PHALLIC IMAGERY Scale (adapted from Greenberg & Fisher, 1980)

A response is scored as exhibiting phallic imagery is it meets any of the following criteria:

1. All elongated objects like arrow, spear, gun, umbrella, cane, knife, pole, cigar, or cigarette or pipe, rod, candle, chimney stack, weather vane, masts, ship, tank, rocket, airplane, automobile, missile, motor boat, ski, flute (also trees, trains, skyscrapers, and hooded or capped objects).

2. All *explicit* references to human body protrusions: e.g., nose, chin, tongue sticking out, penis, pony tail, extended legs or arms, fingers, but not hands (also feet and teeth).

3. All explicit references to body attachments with phallic connotations: e.g., helmet with horns, artificial nose, spurs, cigarette or cigar or pipe in mouth, snorkel, blowpipe, pea shooter, musical instruments with phallic shape.

4. All explicit references to protrusion in insects and animals and plants: e.g., horns, antenna, claws, trunk, tail, tentacles, long neck, pointed ears, projection, thumb, finger, branch, top of Christmas tree.

5. Geographical formations with phallic shape: e.g., mountain peak, stalagmite, pointed rock.

6. References to "projection" motion or spatial contexts like sticking out, shooting out, sticking up, protruding, towering, soaring, taller than, bigger than, longer than, pointing, shooting (also things that can penetrate).

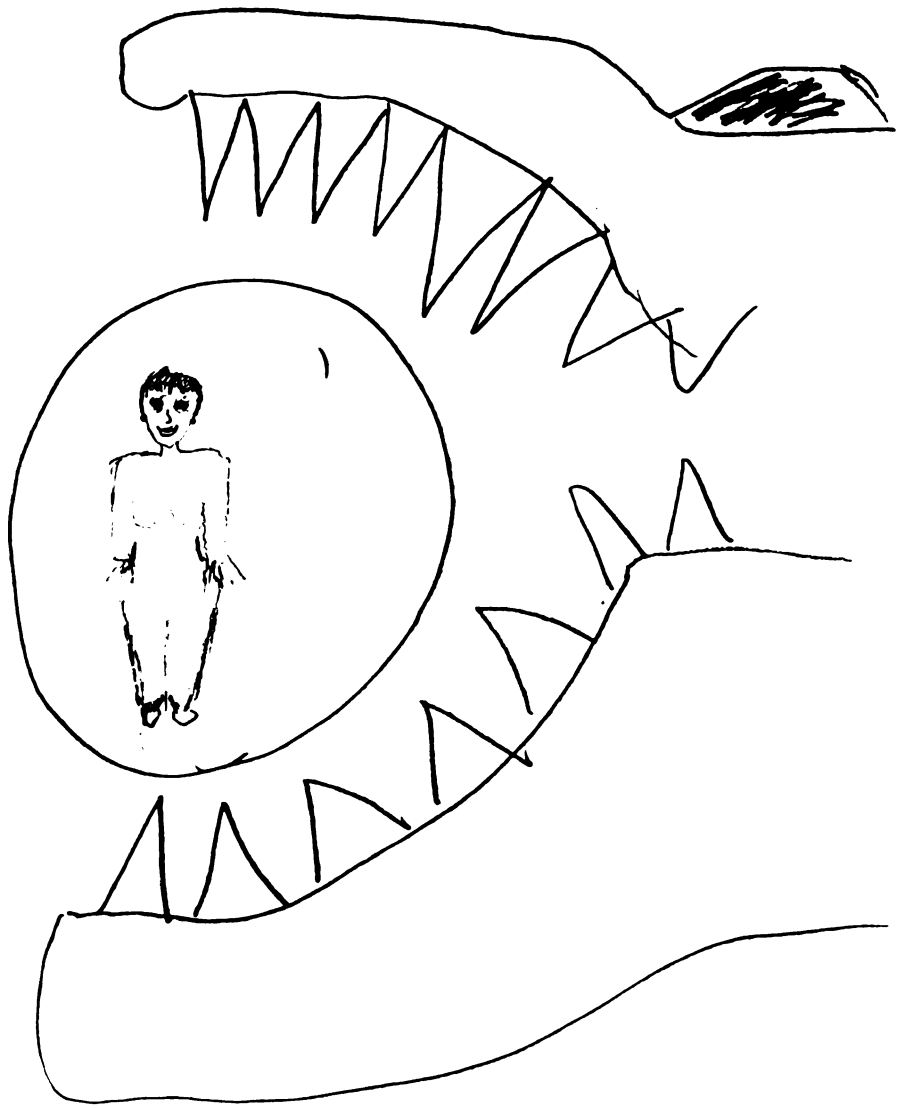
Things which I added to the original scale are in parentheses.

The final score is the number of applicable categories.

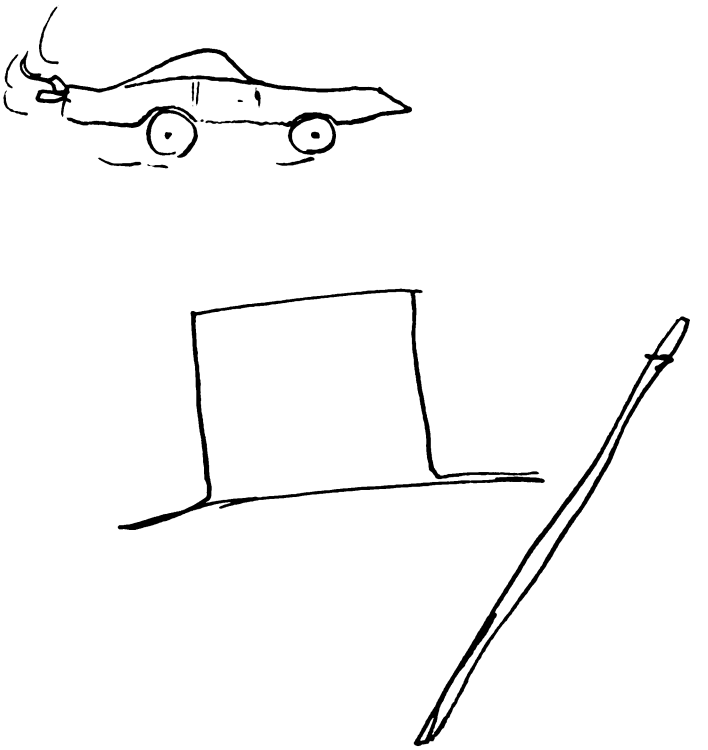
APPENDIX P

Sample Figure Drawings

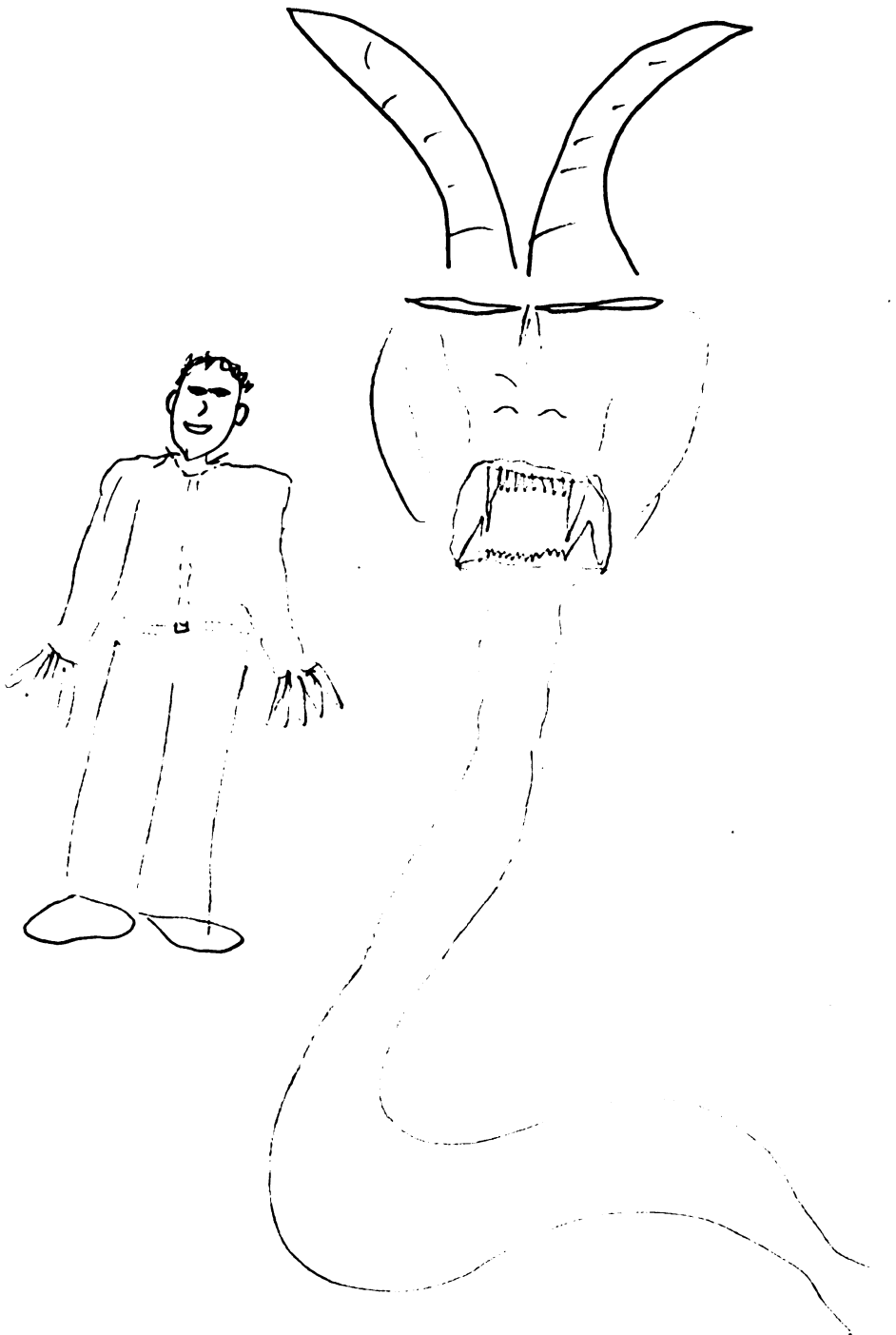
Male participant #17: mother drawing



Male participant #17: auto drawing



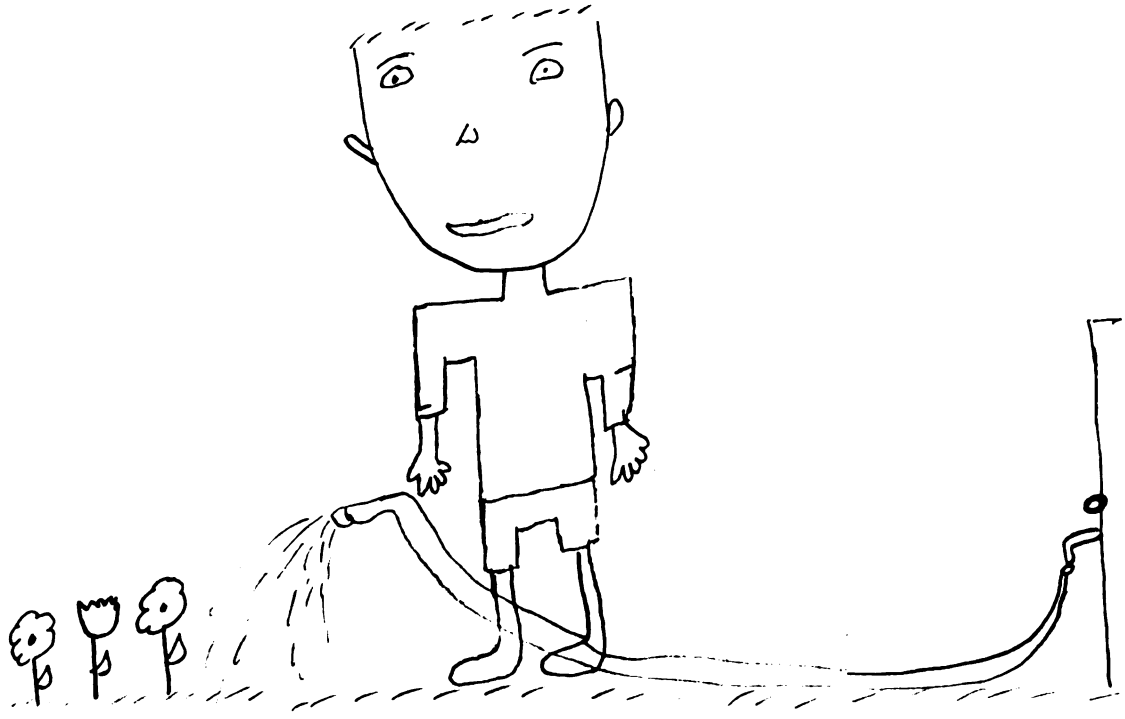
Male participant #17: father drawing



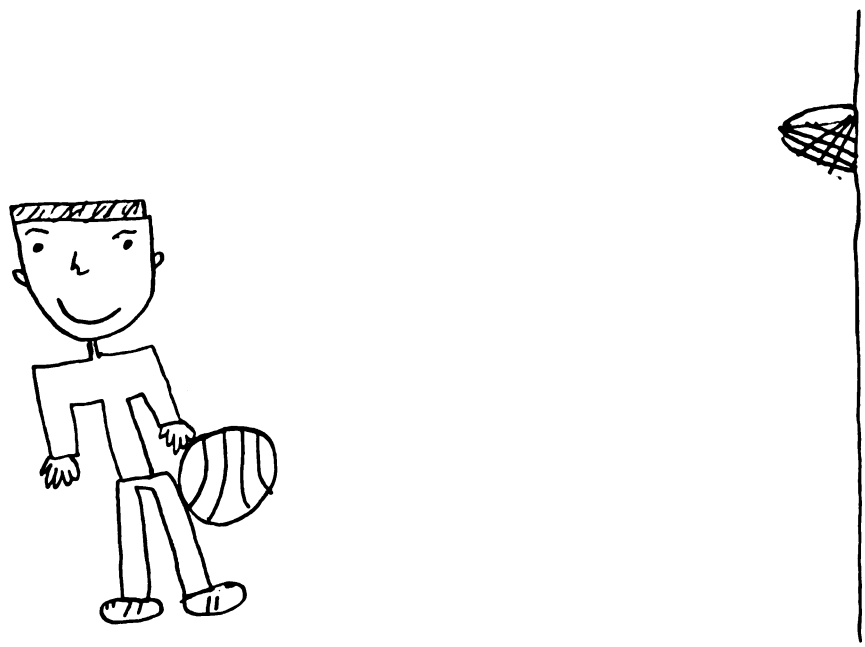
Male participant #17: opposite gender drawing



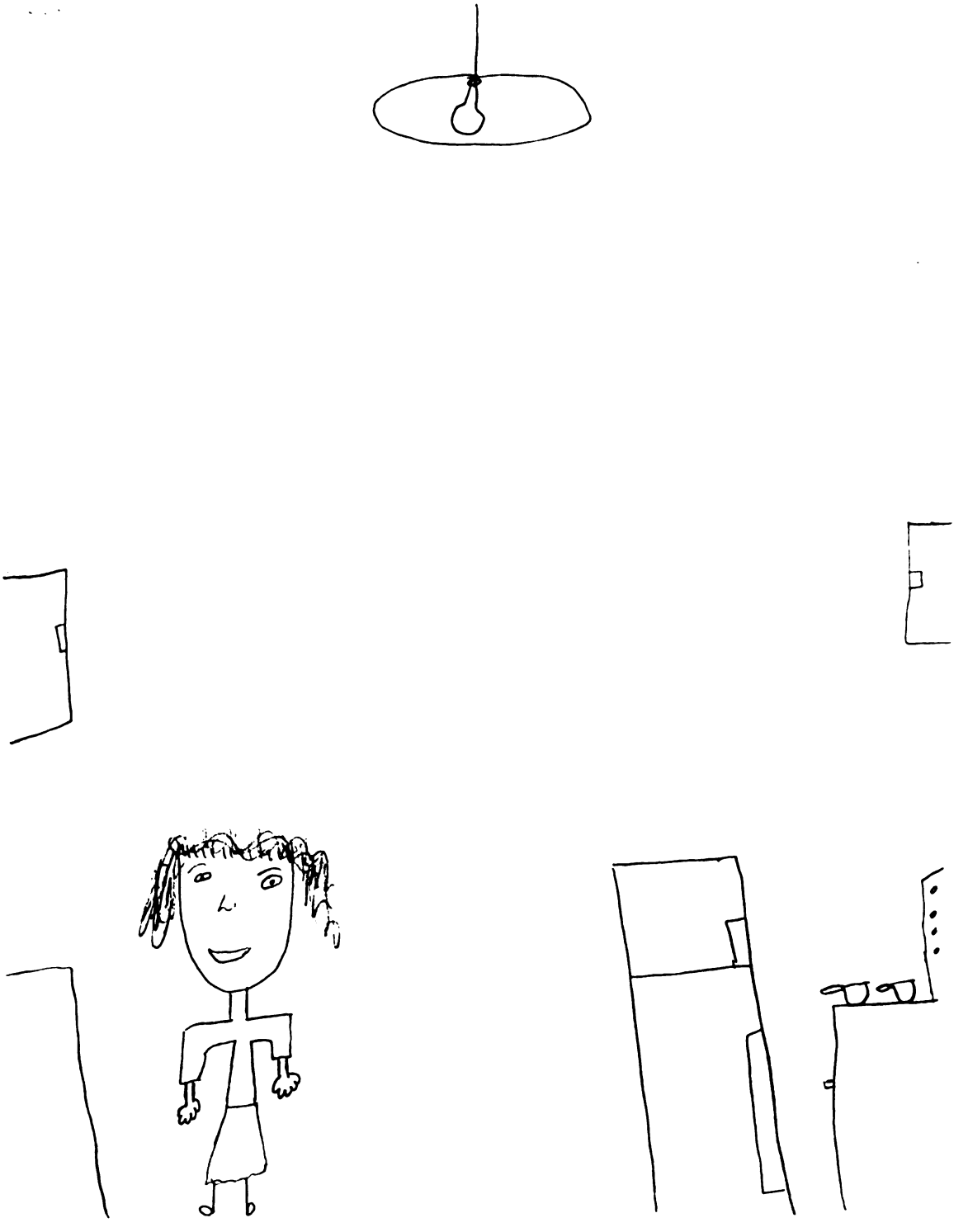
Female participant #10: father drawing



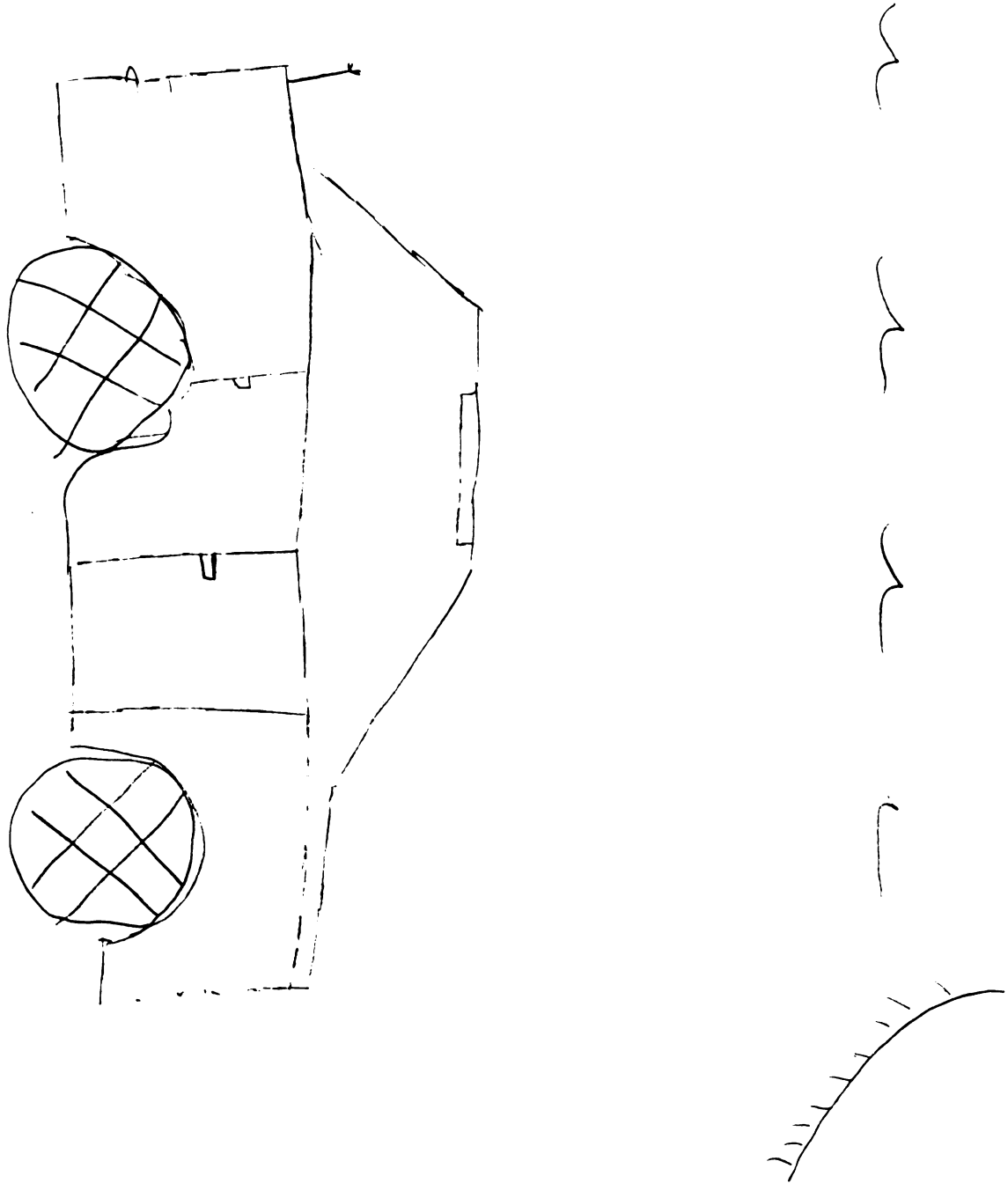
Female participant #10: opposite gender drawing



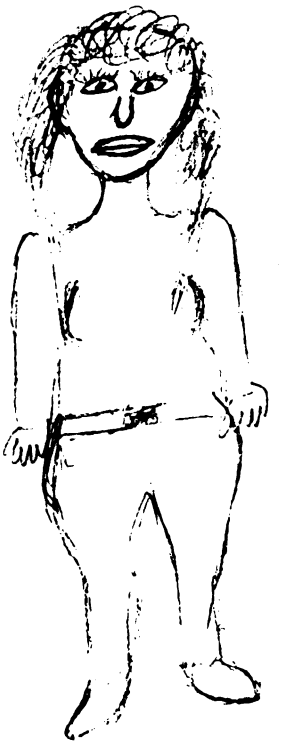
Female participant #10: mother drawing



Female participant #10: auto drawing

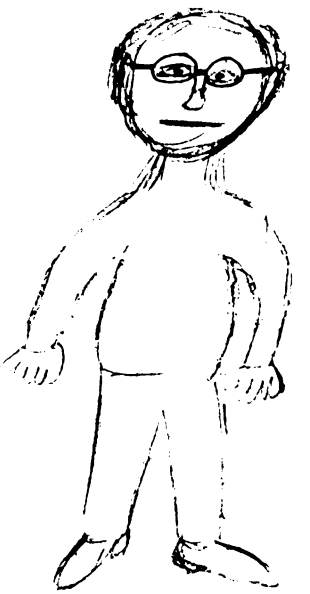


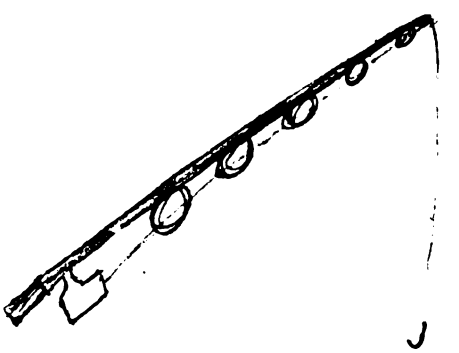
Male participant #32: mother drawing



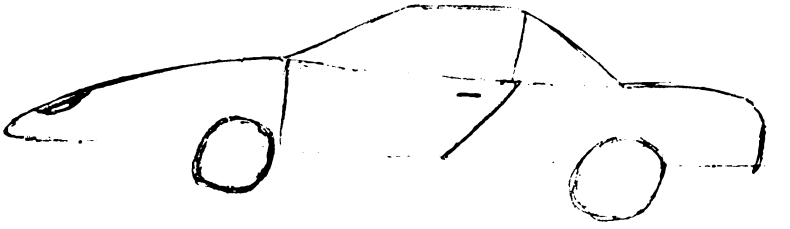


Male participant #32: father drawing





Male participant #32: auto drawing





Male participant #32: opposite gender drawing





APPENDIX Q

Sample Imagery Sessions

Female participant

Mother Drawing

I see a building. It's got like a light background with a little bit of blue around the light background. It's got like steeple on it with a clock, and lots of windows and cars in front of it. And it looks, it kind of reminds me of an office building. And then it's got like an overhang to drive through to drop people off and then get out of it and that's all I can see. (Just let your mind go and report any other images that happen to come up. Anything else you notice.) .... Nothing else is coming to my head. (What do you see right now?) Just like a yellowish blank space. (What was the last thing you saw before that happened?) The building disappearing and my cat showing back up. (And what did that look like?) Like the drawing that I did. (What did you notice when the cat showed up? Any other images along with the cat or anything about the cat?) Nope. Nothing else. (You just noticed the cat.) (And then after that what happened?) It just turned into like a blank yellow space. (Is there anything else about that, it's yellow) It's kind of got little tiny white streaks in it. (Ok, any other images or pictures come into mind now?) A tree. (Can you describe it for me?) Its' really big, it's got a whole in it, like where a squirrel made a nest and it's got all its' green leaves, it's like all green and it's big and puffy and it's got lots of branches. And then it's got roots coming out of the bottom that you can see and then the grass is really green and it's really nice. (You say roots that you can see, what does that look like?) They are just like the stumps that come out of a tree, and the roots that come up over the ground and go back down in. (Any other images or pictures now?) Nope. (Still see the tree or.) No I don't. (What are you seeing now?) It's all black now. (What is the last thing you saw when it went all black.) The tree.

Person of the Opposite Gender Drawing

Black space, with a little bit of a pinkish light around it. There's a heart in the middle of the pink color with a darker black part in the middle. (A heart with a smaller heart inside it) Yes. .... Now the heart is turning into a king cobra. (A king cobra?) Yes. (And what's it look like?) It's outer edges and then his, where the sides of his face puff out it is black, and then his mouth is black but this teeth are a pinkish color and his tongue is black. (What's in your minds eye now?) The black space again. (Can you describe that again?) It's just pure black, the pink

edges are gone it's now just completely black. (What was the last thing you saw before it turned black.) The king cobra disappearing. (Any other images or pictures come to mind now?) No, there's not. (What are you noticing?) There's like a purplish shape, I'm not sure what shape it is, but there's like a purple color right in the middle. (Can you describe it a little more?) It's kind of like an oval shape but it's making circles. (it's moving?) yea, making circles. It's like going in an upwards spiral, spinning around like a tornado. (And what do you see now?) Black space, but it's got more of a white to it now. (It's a little lighter?) Um-hum. (What are you noticing now?) The white is flashing, (flashing?) Um-hum. (What does that look like?) It's like moving in really weird, it like goes one way and then turns and goes the other way, around in circles and it just flashes, like flashes of lightening. (What does it look like when it flashes?) Like a really bright white light, like a flicker of a light. And now the white light is starting to turn into a butterfly shape and it's wings are moving. (It looks like a butter fly?) Um--hum. .... (What's in your minds eye now?) The black background with like a purple light doing what the white light was doing. (it's flashing?) Yea, except it's going in a slower version of what the white light was. (flashing slower?) Um--hum. It's also doing circles.

Father Drawing

A background with hand puppets in like the black background with white hand puppets. (And what do they look like?) One's a dragon and the other one is a cat. (What do each of them look like?) The dragon is green, he has a long pink tongue and he's got fire coming out of his nose, he has purple hair. And the cat is yellow with orange stripes. (Is anything happening with the puppet show or anything going on?) They are fighting. (What's that look like/) The dragon's trying to bite off the cat's head. (What do you see now?) A yellowish space, just blank space except it's a yellow color. (What was the last thing you saw before that happened?) The two puppets disappeared. (What was going on when they disappeared?) They were just looking at each other. (And then they disappeared.) (What's in your minds eye now?) Just the yellow space. (What's that look like?) It looks like the sun with a little bit of white around it and it's really bright. .... (What are you noticing now?) It's disappearing and like it keeps like disappearing and coming back and when it disappears it turns into a purple and then turns black and it comes back into the yellow and then goes into the pure white and then purple and then black again. (Is there any shape or form or anything like that?) It's a circle. (It's a circle?) And it just keeps going that way, being really bright then going to the black and then coming back into the yellow. .... (What's in your minds eye now?) The same thing, except for the yellowish shape changed, it now looks like a funnel,

how a funnel, like a substance would go down in a funnel. (Can you describe that for me?) It kind looks like a waterfall, it's like black up at the top, and then as it goes over the little edge turns yellow and then goes into white and it just looks like a moving river. And it comes down one on each side. (One on each side?) Yes. So that they come together in the middle as they meet after they go over the ledge. (What's that look like?) It looks kind of like a water fall, the water falls that meet in the middle. (What are you noticing now?) A yellow space and it has white in it. No movement or anything in it. (Just still?) Um--Hum. Now I see like a baby that's still in the mother. (In the womb?) Yes. (What's that look like?) It looks like the baby's in about the third stage, it's already developed and it's developed it's arms and it's legs and it's like curled up. You can see where it's eyes and it's nose are forming. And now the yellow space is back. (What's it look like now?) It's like in a spherical shape and moving backwards, it's going from a yellow to a brown color. (And going backwards you said?) Yes. (What makes it look like that?) It's like pulling away from me. (Any other images or pictures come into mind now?) No. (Still with the yellow?) Yes.

Automobile Drawing

An animal that looks like a deer. It's yellow, it's got white down the chin and down to its' stomach. It's ears are like a yellowish color with white in the middle and it's got black eyes and a black nose. It looks like it's running through a field. (What's that look like?) The field is like brown and it looks like a wheat field or alfalfa field. (What makes it look like that?) The tops of the plants. Now I see a farm, it's got a big red barn with like a silver roof. The bottom half is like a milk house type of thing and the top half is used to store hay. (Can you describe with the parts look like?) Um... not really. It's just a fake picture. And right across from that barn is a corn crib, where the corn is kept during the winter. (And what does that look like?) It's tall wire with a wood structure, really long and tall but not very wide. And then on one side of that is a small grain barn, it's got two doors, one door is where the grain is kept and the other door is where rabbits used to be kept. And then on the other side of that is the barn yard where the cows are kept and then on the other side of the corn crib there is another barn that's where hay is kept. There is a big door to it. And then next to that is another corn crib it's spherical in shape with a cone top and then next to that is a chicken coop. (What's that look like?) It's a long barn type thing, it's smaller than all the other barns, and it's got lots of windows around it and it's got three doors on it and off the back is a fenced in area where the chickens go out. And then across from that is a big metal barn, metal shed type thing where the tractors and the combine is kept and then behind that is another pasture where some of our calves are kept. And then there is

a little place for them, a little house for them to sleep in. (What's that look like?) It's smaller than all the other ones, it's really small, it's got a metal roof, it's red. (Any other images or pictures come to mind?) A road. (A road?) Yes. With cars passing by, it's a paved road. With a driveway leading to the farm and the field on the other side of it. I see a lake. (A lake?) yes. (Can you describe it for me?) There's an island out in the middle of it, it's got lots of trees on it and it's really grassy and the suns, it's a sunrise right now, the water is a blue color with like the yellow and the orange shinning on it from the sun.

Male participant

Mother drawing

she's drunk....pain...I see tired, tiredness....a depressed looking person..(Can you describe what it is that makes them look like that?)....The size maybe the weight, facial expression you know like not always smiling, sign of aging that about it.....trees..(What do they look like?)...they are pretty tall, long green leaves, trees is all I see....a fence, its silvery, a silver fence ..... (What are you noticing now?)...a flipping coin, and the images are like flipping, its kinda like images just flipping, a penny the trees the fence just flipping, just like the actual picture, the images are flipping they just keep turning over like that.....like a balloon expanding, red balloon, I see a dot, a black dot.....that it I think.....(What happened just then when you opened your eyes?)...it just ended, I saw the dot and that was it

Father drawing

I draw a blank, I don't see anything.....(What are you experiencing?)...it could be lonely an empty area with nothing there....(Any images, thoughts or feelings now. Is that an empty area or lonely?).....nothing there's just nothing there, nothings coming no pictures, nothing its just dark, there's nothing there.....(Do you notice any feelings or thoughts or anything like that?)...seems like a, maybe secluded maybe, emptiness, loneliness.....(As you think of those words does any image come to mind or any other thoughts or sensations or anything)...a desert, a big desert, a big desert....(And what does that look like?)...just flat, no sand dunes, nothing, just flat sand, for like miles it just continues, doesn't seem that hot though it doesn't seem that hot at all.....bucket of water being dumped on top of the desert...(What does that look like?)...a big gray pail, someone holding it with two hands just emptied it out on top of this desert, desert seemed muddy and then its dark again...(You said the desert seemed muddy?)...muddy...(What did that look like?)...kinda of looks like a giant mud pie, can see like little puddles of water on top of the sand, little puddles all over the place on top of the sand, its kinda of

reflecting like a white reflection off of the water, but there's no sun, see a cactus, a green cactus...(Can you describe that in a little more detail?)...only see one, right in the middle, just one cactus, it shrunk by the sand, water puddles are taking up most of the ground around it...(And what does the cactus look like?)...Its kinda of tall not that tall, it kinda of tall not that tall, its maybe a little taller than I am, there's these needles coming out of it, their not that long, pretty short actually...now it feels like it just fell down, like someone came and with a little saw or something and just cut it down...(Someone cut the cactus down?)... I don't see the saw..(You don't see the saw?)..I see a saw...(And what does that look like?)...like one of those a, I guess a power saw or something with a chain around it, and it just, I mean I can't see any one actually cutting it, I can see the saw and I can see the tree fell, I mean the cactus it fell, I went blank there's nothing else...(What was the last thing you saw?)...it just like went blank, it just like shut off, I have a movie...(the reel ended didn't it, so the last thing you saw was the saw and then the cactus that had been cut down)....right

Female drawing

I see like a lady, her a skin color doesn't stay the same...(It doesn't stay the same?)...No it kinda of changes, her nationality or something, she's not like, she's like Asian, she's Caucasian she keeps changing like that...(What does that look like?)...its kinda of scary actually, I guess she's not,she's not like a set person, like she's not black, she's not white, she's just multi she just keeps changing, she has long hair and is kinda like a light brown.....she seems polite because she smiles a lot, looks kinda of happy...there's like glow, I guess maybe a heavenly glow maybe...(A heavenly glow?)...I guess so...(Can you describe what that looks like?)...A yellowish light like a yellowish-whitish kinda of background glow behind her, it kinda surrounds her, looks like she's smiling, it kinda of appears as if she has this inner glow, she's not like a movie star beautiful or anything like that, she's kinda of ordinary looking, but its almost as if something about her spirit maybe like her inner self...(Can you describe what it looks like that makes you think that?)...She's walking and there's flowers around and a tree, looks like apples I guess and a she's walking by, she's a picking a couple flowers of the ground, picking them of the ground, she's just normal facing, seems as if though she has a little puppy or something with her that's walking with her, its a black dog its pretty hairy, it's real small, it's walking around, it appears to be barking playfully. She reaches down and she pets him she seems real happy, she's like this blue and white dress...(Can you describe that in more detail than blue and white dress?)...it goes about to the knee, a little bit above the knee, there's a white belt like around her waist it ties into a bow in the back, short sleeve, she has white

socks and blue flats on I mean black flats excuse me.....she just sat down, she's eating apples from a tree, she's sitting right up against a tree, she pulled out a book.....I see bells, bells suspended from a like a door entrance or a an entrance, its like kinda of a door entrance but its rectangular and kinda of wide....(You see bells suspended, and what do the bells look like?)...there a silver, silver bells and a they appear to be ringing and...(How many are there?)...like two,there ringing, and I see a cross like a religious symbol, its just like a gold cross, just by itself, no necklace or nothing attached to it.....(Ok you can open your eyes now)

Auto drawing

While I was drawing it a dollar sign came to mind, an S with two lines through it, a man, then there was a bald man with gray and black hair on the sides of his head, with a plaid jacket on, and that was like a green a brown a red, and he had a red tie on with a white shirt, and he was like a you know egging me in a bye, bye, bye, that's what came to mind when I was drawing it....(What do you see now?)...See a highway, it many appear to be like Arizona or something, its like cactuses and open desert area, it's like there's little vegetation in different areas spot all over, and I see like a skull of a cattle next the road...(And what does that look like?)...its like a dirty white looking, like bones, like just a head part, look like it had been there for a while, feels like I'm like like I'm in a car so, driving, the car is red, black interior, dice in the mirror...(And what does that look like, dice in the mirror?)...there a red and white, red dice and the white numbered dots on it...(And how many of those are there?)...there's two hanging from the mirror, and the suns out its a pretty nice day, you can see like little sand dunes, seems like a just like snow on top of dunes, there's a 18 wheeler going across, white cab, blue truck in it is the truck part where the driver is, where he's at is the cab is blue and the trailers white, and it's just like run across the dunes from one dune to the next and I can see him crossing the street as I'm going forward, there's a black top street with a yellow dashes staggered across, don't know the road, two lane highway, the scenery is changing to like a _____ scene and it's like your driving around a lot of mountains, and you can try and make the curve or look over and see like water with a rocks and stuff....feel kinda of dangerous, I see a few seagulls.....It feels like...like I'm a maybe going kinda of fast, I can almost feel my stomach kinda of rise and fall as we make turns and go up and down the hill like road.

Female participant

Mother Drawing

My mother I see her face her hair is growing, its black and it's medium length. I remember that it was growing because, I used to do her hair and it's really soft and

pretty like that. Her face is round, she has medium sized lips and her face is always like really kind looking. (can you describe kind for me?) I mean she just-- it's like she's always smiling on the outside, if there was every anything wrong with her you wouldn't never be able to tell. (so she's always smiling on the outside.) Right. My mom she is always wearing pants, I don't think she's very comfortable in dresses or anything like that. She doesn't wear makeup or lipstick and she really need any because she's naturally beautiful to me. She just sweet and kind. (ok, are there any other images you see?) I see her heart or love. (can you describe that for me?) I guess because, the love that I feel for my mother, or something, because I'm thinking of all these good things about her. (what kinds of things) How supportive she is, how compassionate she is for everyone else and how she always gives of herself. (she gives of herself?) Yea. How we'll always like sit around and joke about things and talk about things and how I feel like I can always go to her to talk about things and that she'll listen and you know she won't pass judgment or anything like that. I guess that's about all. (is there anything else you see, any images?) No, No, that's about it. (I noticed you opened your eyes) ..... (do you want to try to close your eyes for a couple of minutes and see if you can see anything else?) (is there anything you see?) No.

Father Drawing

I see a bear. (can you describe that for me?) It's a very grizzly bear. He's strong and he's a survivor. (can you describe survivor?) He is huge so, I mean, obviously he's been there for awhile and has been able to escape the trappers and he's been able to get his food and get to whatever shelter he needs or whatever. He's just, he's huge and he seems to be, his coat looks warm, he's got alot of fur. (Ok, can you describe what you mean by huge?) He look like, I don't know how much he would usually weigh, he could just be big grizzly bear. But it doesn't look ferocious or anything like that like he would hurt anybody, well not deliberately, only if he needed to defend himself or whatever. He doesn't have any children, he's alone. Or doesn't travel with a pack of bears, he's just out there in the wilderness by himself. That's OK because he's smart enough to counteract anything he might need to make himself feel, give himself company, and he always knows how or when he can get in touch with, like other bears or whatever, but he chooses to be alone, I suppose. (so he chooses to be alone?) I think. He's eating like alot of berries, some herbs or something like that and he's smelling a flower, and it smells great. (so he's smelling flowers) He's always looking at himself in the river or something. He seems to be curious about a lot of things. (can you describe curious for me?) He's always going up to things and smelling them, and even though he seems like he's an older bear and stuff and maybe he's seen these

things a thousand times, he's curious about them, he seems and interested in rediscovering these things even though he may have seen them a thousand times. (do you see your father at all in these images?) I kinda got stuck on this bear. (that's OK, whatever images you see are fine) That's all I have seen since the beginning but, I have tried to picture his face, the way I drew him, but I got this bear. That's all I see, ... I don't know. (are there any other images you see?) Stars (can you describe those for me?) --- just hundreds of them, everywhere. No one stands out more than any other one, ummmm, the sky is clear and there are a lot of stars.

Opposite Gender Drawing

Lips, no face, they are smiling then they are puckered and now they are speaking -- they are kinda like the lips on the twizzlers commercial. I don't think they are saying anything they're just like moving. Now it's frowning. I see a baseball bat. It's just a regular wooden baseball bat...It's not swinging at anything, no one is holding it....I see an old friend of mine, she's eating a carrot and she's laughing. The carrot is like a carrot stick, it's rectangular cut or whatever and I see a birthday cake and I can smell the candles. It's looks like lemon frosting and it doesn't have any writing on it or anything, but I assume from the candles it's a birthday cake. It's on a regular cake dish. Somebody's hand is going in the cake. (Do you know who's hand it is?)..... Somebody's saying "what is she doing?". But I can't see who it is. (And her hand is in the cake?) UmHm. Now I see a beach, and like the tide is coming toward the coast or whatever and the sun is setting and I can hear the water and the seagulls and there's a horse riding on the beach. (Can you describe the horse?) He's brown, he's rather slender, his coat is shiny. (It's shiny?) He doesn't have a saddle on or anything, he just out there by himself. (He's by himself?) Now I see a hand. (What does the hand look like?) It looks like....Caucasian person's hands, it doesn't have any rings, scars it's a man's hand. _____ (Can you describe that for me?) It has black tape on the handle and like the net is broken, it's a regular sized racket.

Automobile Drawing

Pizza... (can you describe it for me?) It's got pepperoni, sausage and green peppers. It's round, the slices are cut really thin and have seeds on it - on the crust. And I see my dog. (And what does your dog look like?) He's a German Sheppard, he big, he's brown with black spots and his hairs are standing up and he's barking. (His hair is standing up?) His ears and he's barking, his tail is moving back and forth. I see one of my neighbors, he's going in the house. (can you describe your neighbor for me?) He's kinda heavy set, he black, he's wearing like a fall jacket, waist length, _____ is at his house and he's saying

HI. My dad's car pulls up and he gets out of the car and he runs in the house. I see a ferris wheel (a ferris wheel?) yes. (Can you describe it for me?) It's really huge and the cars are shaped like tops or something and they spin around, not real fast, but .... and the wheel goes around really slow. and there's somebody screaming. I see a basketball and its bouncing but I don't see anybody dribbling it. (I noticed that you're pulling at your hair) I see those slips again. (are they the same as before or are they different?) they are the same. I see the letter M. (can you describe that for me?) It's just a capital letter M. (Do you know what it might stand for?) No, I have no idea. I see a daisy or a sunflower or something and it's on top of this hill. (It's on top of a hill?) Yes and there are no other flowers around, but the hill's really pretty it's flush green and it seems like it's spring or something, the sun is shining and there isn't a cloud in the sky. And not there's this bee and it going over to the flower and it lands on the flower. (can you describe the bee for me?) It's just a regular honey bee, yellow and black and it's sorta slender, it's not a bumble bee. It's landed on the flower and the petals are closing up. (They're closing up?) Yea. Now I see a letter A, a capital letter A.

Female participant

Opposite Gender Drawing

I see the boy standing in the park area with grass, and there is trees in the background and there's a swing set off to the side, little kids playing, and there is park benches. (Good, just keep describing any images that come to mind, even if they seem unrelated or whatever.) There's birds flying, the sun is coming out, all of a sudden it's clouding over. (Clouding over?) Yea. (What's that look like?) It just casts a shadow over everything, it's a dark cloud and the wind starts to blow. (What do you see now?) The boy that I drew is getting a funny look on his face and starting to maybe walk out of the picture, the little kids have stopped playing. (Any other images come into your mind?) I see parents kind of collecting their kids, taking them away. (What's in your minds eye now?) I'm just focusing on the kite and wondering where it went, in my mind. Um.... (Do you see it now?) Yea, I can still see it. (Can you describe it for me?) I's just a simple looking kite, diamond shaped, with a long string and the tail with the little bows on it. Just drifting aimlessly. (What do you notice now?) Now it's just a quite scene and there's no people, just the grass and you know the park accessories, whatever. (Any other images or pictures come into your mind now?) No, I can't see anything else. (You're still on the park?) Um--Hum. (What do you notice now?) I missed the little pond. (What does that look like?) Um.... just a small little swimming hole type of pond, nice clear water, little waves, I don't see any fish. (Any other

images now?) Now, I'm thinking of a guy carrying a canoe. (You can see that now?) Yea. (What's that look like?) He's just kind of lugging it along, pulling it, actually I guess there's somebody at the other end, so they are lifting it, carrying it toward the pond which is strange because the pond in my minds eye isn't big enough to fit the canoe. (Now what do you see?) Just standing by the side of the pond and I see a rainbow. (Can you describe what that looks like?) Um.. it's very well defined colors, um.... there's red, orange, yellow, green, blue, purple and they are all real distinct, not faded together like a real rainbow. Very distinct colors, just in an arch shape (in a what--arch) Arch shape. Now I see that boy that I drew standing in the foreground again. Just standing there. (What do you notice?) About him? (Um--hum) Um...not he's just got a pleasant expression on his face, I guess, he's just standing there, the wind is still blowing a little bit so his hair is blowing.

Automobile Drawing

The car is moving slowly along the road and it just keeps increasing in speed. It much have just gotten on the road and started to go. I see a lot of trees along the road, just driving along, it's not passing the traffic, yet. A semi just passed. (What did that look like?) It had a big red cab, with just the single trailer behind it, just metal, no words on the side of it or anything, large obviously. But I can't see any people driving, I see the truck and the car. Now I see the car heading toward a tunnel. It must go through the side of a mountain. It's going through the tunnel, it's pretty dark. I can't see either end. And now, it's out of the tunnel (it's what?) it's out of the tunnel. (And what do you see?) I see just green grass, mountains off in the distance the snow on the top of the mountains, rocks, a lot of rocky land, scraggly little trees. (Scraggly?) Scraggly. (And what makes them look like that?) Real thin, twisted trunks, with little branches, not a whole lot of leaves or green on them I guess they are just real brown and short, thin. I see a 'caution falling rocks' sign. Now I'm picturing, driving by a big red barn with white like around the door and around the roof, big white silo next to it. Cows, lots of cows standing in the field. There's a tractor in front of the big white ranch house. Now I'm picturing as almost I'm inside the car I can see like I'm looking through the windshield. (And what are you noticing?) Um....just, I just notice the sky, blue sky, with little white puffy clouds, now I'm noticing on-coming traffic with head lights. (What's that look like?) Um... you just see the two lights in the distance and then they get closer and larger and pass in a blur, but I see a lot of cars now, so it's like a continuous stream of headlights, even though it's daylight out. I see the McDonalds golden arches. (What's that look like?) Just a sign by the side of the road with, well I guess it is actually at the restaurant and they have just the sign, it's

just on the big pole with the big yellow M at the top. The car is taking a detour through like a little off road, not an exit, because it goes right back on. Like an extra little road that goes off and then comes back on. (Any other images now?) I see my three little sisters in the back of the car. (What's that look like?) My, the oldest of my younger sisters is sitting in the middle, so she's the tallest. I see their heads the tall one in the middle and the two shorter ones on the side. I just see them looking down at their last playing game and laughing, telling them each other to get out of their space. Now the youngest one is looking out the window and playing the alphabet game.

Mother Drawing

I see my Mom standing on the beach on Lake Michigan, the sand is warm and kind of blowing a little bit and there's beach grass, partially on the beach, I can see that blowing, there's stairs that go up from the beach to a cottage. I can't really see the cottage because of all the trees, you can just see the stairs winding up through the woods. And I see the suns out, and there's a sail boat on the beach and there's a lot of people actually, out sailing on the lake and I can see a lower laker on the horizon. (A what?) A lower laker, (what's that) it's a big long boat that carries, I'm not sure exactly what it carries, some sort of cargo that they haul around and it rides really low in the water. (So what does it look like?) It's just a long, it's out on the horizon, its really long and not too tall, it's pretty short, flat boat, well one end has a, were it's going along flat, there's like a little, it almost looks like there's a little cab on it but it's not it like an extra box I don't know what exactly it is, I'm not real familiar with those boats. (What other images or pictures are in your mind now?) I see the waves breaking, so I can see the whites, what is it called, the breaking of the waves. I see a lot of sea gulls, they are standing all over the beach, they are just in groups. They take off flying one at a time. I see people running down the beach. My moms' now on the sailboat, pushing it out and going sailing. There's just enough wind that she can go, its not too much. I can see the sail, it's triangular but it has a white, yellow, purple and pink stripes. I see, now there's fishing boats out, trolling lines behind them. I see some jet skis. I can see a light house far off to the left, the blinking red and green lights, alternating. Now I can see myself running on the beach, I'm running along. There's a dog, chased a stick into the water and got out and shook all over the place.

Father Drawing

I see my Dad he's dressed in clothes for work. He's a professor so he's got nice clothes on, but he's standing in the orchard with all these apple trees around. And I see people out in the orchard picking apples. Um.... then, now all of a sudden I see springtime when the apples, when the blossoms are blooming so the trees are

all white. (What does it look like?) You look out into the orchard and you see, you don't see very much green on the trees at all you just see the white flower, like a white flowered tree almost. I can see, now I see a shaker, a cherry shaker, my uncle is driving, driving it. (What does it look like?) Big yellow machine with black like conveyer belt tarp thing that catches all the cherries. It's a wrap around one so like a big, like a tree skirt. It wraps around the tree and then it basically grabs the trunk of the tree and starts shaking it and all the cherries come off onto the tarp thing. And I can see tractors driving around through the orchard. (What's that look like?) It looks like my two cousins driving the tractors, they are blue tractors with the fork lift and on the front so that they can lift big boxes or big tanks of cherries. They are just moving real slow. And now I see the pine trees that are up at the top of the hill. There's a bunch of them. (What's that look like?) The orchard is going up a hill and at the top there's rows of pine trees, almost like a little forest of pine trees. Just, they are really tall, very green. Now I see my back yard, (What do you see there?) Just flat green grass, the swing set on one side, surrounded by the pine trees that I was talking about before. Now I'm picturing off the side of our back yard, there's a hill that goes down, now it's winter time and it's snowing and we are all bundled up and we are racing down the hill on sleds and running up it and my Dad has a pair of skis on. And we built a snow fort and it was a huge drift in the middle of our back yard and we dug a tunnel all the way through it and it was large enough so that we could stand and walk through the fort but then Dad came and said we had to knock it down, so. It's flat now. (The fort is flat now?) Let's see, now we are building a snow man and we have a carrot nose and raisin mouth, sticks for arms and put mittens on it and a hat and we used something round and black for buttons I don't know what it is. There's a dog running around in the snow. (What's that look like?) Um.... the dog is a golden retriever and it's running thorough and almost leaping the front half of the dog goes up and down and kind of disappears through the snow, because it's light snow. And I see a trail through the woods. (What's that look like?) Just a narrow parting between all the pine trees that winds up and down hills through, until it get to the other side of the pine trees. Um.... there's a lot of little undergrowth by the side of the trail and sticks, laying along the side, and there's a big rock. (Where is' that) The rock is on the side just off the path a little bit. (What does the big rock look like?) It's got a flat top but then it has slightly rounded sides, it's gray and probably about, it's pretty large, it looks like three feet tall. I can see kids climbing on the rock and sitting on the top and playing around it. And there's a tire swing behind that and the kids are playing on that, twisting each other up and pushing the tire swing. Trying to push them into the trees. Um... There's a fire pit, a little

whole dug out with rocks around it and wood in the center. Now there's a fire going, and people are roasting marshmallows and hot dogs. They are singing it looks like. (Singing?) Yes.

Female participant

Auto drawing

I'm going home. (And what do you see?) A house and trees, my family is standing outside, cars in the driveway and neighbors all around. (So you saw your house, just describe whatever comes to mind, even if it's unrelated.) Going home to watch my sister. (Do you see her now, or do you see?) Yes. (Are you watching her now?) Yes. (Can you describe that for me?) I'm watching her play basketball and at our high school in the gym, she's really tall, she's really good at basketball. (So you see her playing.) Um-hum. (And what else do you notice?) Everyone else is out there on the court, everyone in the stands. (Anything else?) Not really. (OK).

Father drawing

I can see my Dad giving me a big hug and kiss and happy that I'm home whenever I see him. Just sitting down and talking about everything. He's always real interested in everything I'm doing, and how I'm doing and my Dad will go off jogging, he's a real exerciser. (What do you see in your minds eye now?) I can see him jogging throughout the neighborhood. Everyone is always saying hi to him. Then he comes back all sweaty. (He's all sweaty?) Uh--huh. Always does his little jokes, like trying to drip his sweat on us. (Can you describe what that looks like? What you see.) Like him standing over me, like trying to get the sweat drip off his face and trying to make it land on me. I always just back up and say "no". He's always outside working around the yard. (What do you see?) Him bending over pulling weeds or fixing up the plants or trimming back the bushes, or mowing the grass. (What's coming into your mind now?) Just how he's always there for me and (any other images or?) No.

Mother drawing

I can see when I get home in the house she gives me a big hug and kiss, the same as my Dad did. Always just wants to talk and talk and talk, and just find out how I'm doing. (What do you see right now?) I'm sitting on the couch and her talking to me. Usually you can never get anything done, when I go home for a weekend because she wants to talk about what's going on. Always really proud of me. And then I can see her taking me out, taking me shopping and everything. We go grocery shopping and get everything I need. And go shopping and get our hair cuts. (What images are in your mind?) Just going sitting there in the chair, getting

my hair cut. (Can you describe it for me?) I'm sitting there and I have my hair wet and my hair dresser is cutting my hair and I have a coat over myself so I don't get the hair all over me. My mom is sitting in the chair next to me, just talking to my hair dresser and I. I'm going shopping, she will always buy me whatever I need. Because up at school, I'm not really able to go shopping for myself. (What do you see about that?) (What image do you see?) Just getting all my food and everything. (You see you buying food?) Yes. (Can you describe it for me, what you see?) Um... just walking up and down the isle looking for fruit and crackers and that's about it. (Any other images come to mind, anything you see?) Um.. no not really.

Opposite gender drawing

I can see my boyfriend standing there and I can see us in the future getting married. (What's the image you see?) Us at the alter, and everyone around and our having a big church and all our family and friends and how happy everyone is and I can see me hugging like all his family and all his family. Then I can see farther down the road, us having kids, and how well my husband will treat the kids. (Is there a specific image you have about that?) I can just see him acting the same way my Dad did toward us, always supporting them, always playing with them, always going to their baseball games and track meets and watching everything and always playing catch with them and I'll be doing the same. And (What images have come to mind?) Um... just how happy we're going to be. I can see our house and everything and him being a dentist. (Any other pictures or...) No.

LIST OF REFERENCES

REFERENCES

Abraham, H. C., & Freud, E. L. (1965) The letters of Sigmund Freud and Karl Abraham. New York: Basic Books, Inc.

Abraham, K. (1920/1927). Manifestation of the female castration complex. In Selected papers of Karl Abraham. London: The Hogarth Press.

Acheson, A. N. (1972). The DAP and visual imagery in assessing psycho-sexual conflict. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Alexander, F. (1923). The castration complex in the formation of character. International Journal of psychoanalysis, 6, 11-42.

Alexander, F. (1935). Concerning the genesis of the castration complex. Psychoanalytic Review, 22, 49-52.

Amann-Gainotti, M., & Sellaroli, T. (1992). Sexual differentiation in children's drawings of pregnancy. Acta Peadopsychiatrica, 55, 9-13.

Arlow, J. A., & Brenner, C. (1964). Psychoanalytic concepts and the structural theory. New York: International Universities Press, Inc.

Atkins, F. (1966). The social meaning of the Oedipus myth. Journal of Individual Psychology, 22, 173-184.

Attkisson, C. C., Waidler, V. J., Jeffrey, P. M., & Lambert, E. W. (1974). Interrater reliability of the Handler draw-a-person scoring. Perceptual and Motor Skills, 38, 567-573.

Balay, J., & Shevrin, H. (1988). The subliminal psychodynamic activation method: A critical review. American Psychologist, 43, 161-174.

Balmary, M. (1982). Psychoanalyzing psychoanalysis: Freud and the hidden fault of the father. Baltimore, MD: Johns Hopkins University Press.

Behn-Eschenburg, H. (1935). The antecedents of the Oedipus complex. International Journal of Psychoanalysis, 16, 175-185.

Bellak, L. (1993). Psychoanalysis as a science. Boston: Allyn and Bacon.

Bemporad, J. (1995). *Oedipus Rex* and Oedipus complex. Journal of the American Academy of Psychoanalysis, 23, 493-500.

Berg, G., & Berg, R. (1983). Castration complex: Evidence from men operated for hypospadias. Acta Psychiatcia Scandinavia, 68, 143-153.

Bergmann, M. V. (1995). Observations on the female negative Oedipal phase and its significance in the analytic transference. Journal of Clinical Psychoanalysis, 4, 283-295.

Bernstein, A. (1976). Freud and Oedipus: A new look at the Oedipus complex in light of Freud's life. Psychoanalytic Review, 63, 393-407.

Bettelheim, B. (1962). Symbolic wounds. New York: Collier Books.

Bettelheim, B. (1976). The uses of enchantment. New York: Vintage Books.

Bibring, G. L. (1953). On the "Passing of the Oedipus complex" in a matriarchal family setting. In R. M. Loewenstein (Ed.), Drives, affects, behavior. New York: International Universities Press, Inc.

Block, W. E., & Ventur, P. A. (1963). A study of the psychoanalytic concept of castration anxiety in symbolically castrated amputees. Psychiatric Quarterly, 37, 518-526.

Blum, G. S. (1949). A study of the psychoanalytic theory of psychosexual development. Genetic Psychology Monographs, 39, 3-99.

Blum, H. P. (Ed.) (1977a). Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Blum, H. P. (1977b). Masochism, the ego ideal, and the psychology of women. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Boehm, F. (1931). The history of the Oedipus complex. International Journal of Psychoanalysis, 12, 431-451.

Bollas, C. (1996). Figures and their functions: On the Oedipal structure of a psychoanalysis. Psychoanalytic Quarterly, 65, 1-20.

Bonaparte, M. (1953). Female sexuality. New York: International Universities Press, Inc.

Bradford, J. L. (1967). Sex differences in anxiety. Unpublished doctoral dissertation, University of Minnesota.

Brener, E. M. (1969). Castration anxiety, sexual fantasy, and sexual adjustment. Unpublished doctoral dissertation, Boston University.

Brenner, C. (1957). An elementary textbook of psychoanalysis. New York: Doubleday Anchor.

Brierley, M. (1936). Specific determinants in feminine development. International Journal of Psychoanalysis, 17, 163-180.

Britton, R. (Ed.) (1989). The Oedipus complex today: Clinical implications. London: Karnac.

Bromberg, P. M. (1967). The effects of fear and two modes of anxiety on social affiliation and phobic ideation. Unpublished doctoral dissertation, New York University.

Burns, B., & Reyher, J. (1976). Activating posthypnotic conflict: Emergent uncovering psychotherapy, repression, and psychopathology. Journal of Personality Assessment, 40, 492-501.

Cameron, P. (1967). Confirmation of the Freudian psychosexual stages utilizing sexual symbolism. Psychological Reports, 21, 33-39.

Carlisky, M. (1967). Oedipus, beyond complex. Psychoanalytic Review, 54, 100-106.

Chasseguet-Smirgel, J. (Ed.) (1970). Female sexuality: New psychoanalytic views. Ann Arbor: University of Michigan Press.

Chasseguet-Smirgel, J. (1976). Freud and female sexuality: The consideration of some blind spots in the exploration of the "dark continent." International Journal of Psychoanalysis, 57, 275-286.

Chehrazi, S. (1986). Female psychology: A review. Journal of the American Psychoanalytic Association, 34, 141-162.

Chodoff, P. (1966). A critique of Freud's theory of infantile sexuality. American Journal of Psychiatry, 123, 507-518.

Clary, E. G., & Tesser, A. (1985). Another look at castration anxiety and fear of death. The Journal of Social Psychology, 125, 397-398.

Cohen, J. (1992). A power primer. Psychological Bulletin, 112, 155-159.

Colman, W. (1994). "The scenes themselves which lie at the bottom of the story:" Julius, circumcision, and the castration complex. Psychoanalytic Review, 81, 601-625.

Crowell, M. G. (1981). Feminism and modern psychoanalysis: A response to feminist critics of psychoanalysis. Modern Psychoanalysis, 6, 221-235.

Cuddihy, J. M. (1974). The ordeal of civility. New York: Basic Books.

Dar, R. (1987). Another look at Meehl, Lakatos, and the scientific practices of psychologists. American Psychologist, 42, 145-151.

Detterman, D. K. (Ed.) (1992). Current topics in human intelligence, Vol. 2: Is mind modular or unitary. Norwood, NJ: Ablex Publishing Corp.

Deutsch, H. (1925). The psychology of women in relation to the functions of reproduction. International Journal of Psychoanalysis, 6, 405-418.

Deutsch, H. (1930). The significance of masochism in the mental life of women. International Journal of Psychoanalysis, 11, 48-60.

Deutsch, H. (1944-1945). The psychology of women (vols. I, II). New York: Grune and Stratton.

Devereux, G. (1953). Why Oedipus killed Laius: A note on the complementary Oedipus complex. International Journal of Psychoanalysis, 34, 132-141.

Devereux, G. (1960). Retaliatory homosexual triumph over the father: A further contribution to the counter-oedipal sources of the Oedipus complex. International Journal of Psychoanalysis, 41, 157-161.

Edmunds, L. (1985). Freud and the father: Oedipus complex and Oedipus myth. Psychoanalysis and Contemporary Thought, 8, 87-103.

Edmunds, L., & Ingber, R. (1977). Psychoanalytic writings on the Oedipus legend: A bibliography. American Imago, 34, 374-386.

Edwards, A. L. (1950). Experimental design in psychological research. New York: Rinehart & Company, Inc.

Engel, B. T. (1985). Stress is a noun! No, a verb!, No, an adjective. In T. M. Field, P. H. McCabe & N. Schneiderman (Eds.), Stress and coping. New Jersey: Lawrence Erlbaum, Publishers.

Erickson, M. T. (1993). Rethinking Oedipus: An evolutionary perspective of incest avoidance. American Journal of Psychiatry, 150, 411-416.

Erikson, E. H. (1950). Childhood and Society. New York: W. W. Norton & Company, Inc.

Fairbairn, R. W. D. (1952). Psychoanalytic studies of the personality. London: Routledge & Kegan Paul.

Feiner, K. (1988). A test of a theory of anxiety about body integrity: Part 2. Psychoanalytic Psychology, 5, 71-79.

Feldman, M. (1990). Common ground: The centrality of the Oedipus complex. International Journal of Psychoanalysis, 71, 37-47.

Fenichel, O. (1925/1953). Introjection and the castration complex. The collected papers of Otto Fenichel, pp. 39-70. New York: W. W. Norton & Company Inc.

Fenichel, O. (1930/1953). The pregenital antecedents of the Oedipus complex. The collected papers of Otto Fenichel, pp. 181-203. New York: W. W. Norton & Company Inc.

Fenichel, O. (1931/1953). Specific forms of the Oedipus complex. The collected papers of Otto Fenichel, pp. 204-220. New York: W. W. Norton & Company Inc.

Fenichel, O. (1945). The psychoanalytic theory of neurosis. New York: W. W. Norton & Company, Inc.

Ferenczi, S. (1912/1952). Symbolism. In S. Ferenczi, First contributions to psychoanalysis. London: The Hogarth Press Ltd.

Fine, R. (1948). The use of the Despert fables. Rorschach Research Exchange, 12, 106-118.

Firestone, R. W. (1994). A new perspective on the Oedipal complex: A voice therapy session. Psychotherapy, 31, 342-351.

Fisher, S., & Greenberg, R. P. (1977/1985). The scientific credibility of Freud's theories and therapy. New York: Columbia University Press.

Fisher, S., & Greenberg, R. P. (1996). Freud scientifically reappraised. New York: John Wiley & Sons, Inc.

Fliegel, Z. O. (1973). Feminine psychosexual development in Freudian theory. Psychoanalytic Quarterly, 42, 385-408.

Fodor, J. (1983). The modularity of mind: An essay on faculty psychology. Cambridge, MA: The MIT Press.

Fodor, N. (1947). Varieties of castration. American Imago, 2, 32-48.

Freeman, D. (1967). Totem and Taboo: A reappraisal. In W. Muensterberger & S. Axelrad (Eds.), The psychoanalytic study of society, Vol. 4. New York: International Universities Press.

Freud, A. (1951). Observations on child development. The Psychoanalytic Study of the Child, 6, 18-30.

Freud, S. (1897/1954). The origins of psychoanalysis: Letters to Wilhelm Fliess, drafts and notes, 1887-1902. New York: Basic Books Inc., Publishers.

Freud, S. (1900/1955). The interpretation of dreams (third ed., rev.). New York: Basic Books, Inc.

Freud, S. (1905/1949). Three essays on the theory of sexuality (4th edition). London: Imago Publishing Company, Limited.

Freud, S. (1908a/1949). On the sexual theories of children. Collected Papers, Vol. II, pg. 59-75.

Freud, S. (1908b/1949). The relation of the poet to day-dreaming. Collected Papers, Vol. IV, pg. 59-75.

Freud, S. (1909a/1949). Analysis of a phobia in a five-year-old boy. Collected Papers, Vol. III, 149-287.

Freud, S. (1910a/1949). Contributions to the psychology of love: A special type of choice of object made by men. Collected Papers, Vol. IV, 192-202.

Freud, S. (1910b/1957). Leonardo da Vinci and a memory of his childhood. The standard edition of the complete psychological works of Sigmund Freud, Vol. 11. London: The Hogarth Press.

Freud, S. (1911/1949). Formulations regarding the two principles in mental functioning. Collected Papers,Vol. IV, 13-21.

Freud, S. (1913/1953). Totem and taboo. The standard edition of the complete psychological works of Sigmund Freud, Vol. 13. London: The Hogarth Press.

Freud, S. (1914/1949). On narcissism- An introduction. Collected Papers, Vol. IV, 30-59.

Freud, S. (1915a/1949). The unconscious. Collected Papers, Vol. IV, 98-136.

Freud, S. (1915b/1949). Repression. Collected Papers, Vol. IV, 84-97.

Freud, S. (1915c/1949). Instincts and their vicissitudes. Collected Papers, Vol. IV, 60-83.

Freud, S. (1916/1949). Metapsychological supplement to the theory of dreams. Collected Papers, Vol. IV, 137-151.

Freud, S. (1918/1949). From the history of an infantile neurosis. Collected Papers, Vol. III, 473-605.

Freud, S. (1920/1963). Introductory lectures on psycho-analysis. New York: W. W. Norton & Co.

Freud, S. (1921/1948). Group psychology and the analysis of the ego. London: The Hogarth Press.

Freud, S. (1923/1949). The infantile genital organization of the libido. Collected Papers, Vol. II.

Freud, S. (1924/1949). The passing of the Oedipus complex. Collected Papers, Vol. II, 269-276.

Freud, S. (1925/1950). Some psychological consequences of the anatomical distinction between the sexes. Collected Papers, Vol. V, 186-197.

Freud, S. (1926/1936). Inhibitions, symptoms, and anxiety. London: Hogarth Press.

Freud, S. (1928/1950). Dostoevsky and parricide. Collected Papers, Vol. V, 222-242.

Freud, S. (1931/1950). Female sexuality. Collected Papers, Vol. V, 252-272.

Freud, S. (1933/1964). New introductory lectures on psychoanalysis. New York: W. W. Norton & Company.

Freud, S. (1935/1971). Freud and female sexuality: A previously unpublished letter. Psychiatry, 34, 328-329.

Freud, S. (1937/1964). Analysis terminable and interminable. The standard edition of the complete psychological works of Sigmund Freud, Vol. 23, pp. 209-254. London: The Hogarth Press.

Freud, S. (1940/1964). An outline of psychoanalysis. The standard edition of the complete psychological works of Sigmund Freud, Vol. 23, pp. 141-208. London: The Hogarth Press.

Friedman, R. (1996). The role of the testicles in male psychological development. Journal of the American Psychoanalytic Association, 44, 201-253.

Friedman, R. C., & Downey, J. I. (1995). Biology and the Oedipus complex. Psychoanalytic Quarterly, 64, 234-264.

Friedman, S. M. (1952). An empirical study of the castration and Oedipus complexes. Genetic Psychology Monographs, 46, 61-130.

Fromm-Reichmann (1936/1995). Female psychosexuality. Journal of the American Academy of Psychoanalysis, 23, 19-32.

Gaines, W. M. (1994). Wish-fulfillment: A psychophysiological investigation of Freudian theory. Unpublished doctoral dissertation. Michigan State University, East Lansing, MI.

Galenson, E., & Roiphe, H. (1977). Some suggested revisions concerning early female development. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Gholson, B., & Barker, P. (1985). Kuhn, Lakatos, and Lauden: Applications in the history of physics and psychology. American Psychologist, 40, 755-769.

Gillespie, W. H. (1975). Women and her discontents: A reassessment of Freud's views on female sexuality. International Review of Psychoanalysis, 2, 1-9.

Gitelson, M. (1952). Re-evaluation of the role of the Oedipus complex. International Journal of Psychoanalysis, 33, 351-354.

Goodenough, F. (1926). Measurement of intelligence by drawings. Chicago: World Book Company.

Graber, R. B. (1981). A psychocultural theory of male genital mutilation. The Journal of Psychoanalytic Anthropology, 4, 413-434.

Greenacre, P. (1950). Special problems of early female sexual development. The Psychoanalytic Study of the Child, 5, 122-138.

Greenacre, P. (1953). Penis awe and penis envy. In R. M. Loewenstein (Ed.), Drives, affects, behavior. New York: International Universities Press, Inc.

Greenacre, P. (1968). Perversions: General considerations regarding their genetic and dynamic background. The Psychoanalytic Study of the Child, 23, 47-62.

Greenberg, R. P., & Fisher, S. (1980). Freud's penis-baby equation: Exploratory tests of a controversial theory. British Journal of Medical Psychology, 53, 333-342.

Grossman, W. I., & Stewart, W. A. (1977). Penis envy: From childhood wish to developmental metaphor. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Grünbaum, A. (1984). The foundations of psychoanalysis: A philosophical critique. Berkley: University of California Press.

Grünbaum, A. (1993). Validation in the clinical theory of psychoanalysis. Madison, CT: International Universities Press, Inc.

Gupta, P. (1984). Castration complex-- A review. Samiksa, 38, 27-43.

Gurin, M. G. (1953). Differences in the psychological characteristics of latency and adolescence: A test of relevant psychoanalytic propositions utilizing projective material. Unpublished doctoral dissertation, University of Michigan.

Hall, C., & Van de Castle, R. L. (1964). An empirical investigation of the castration complex in dreams. Journal of Personality, 33, 20-29.

Hamernik, K. J. (1985). Anxiety in figure drawings, their stories and wishes. Unpublished master's thesis, Michigan State University, East Lansing, MI.

Hamernik, K. L. (1987). Experimenter personal power and monitoring effects on figure drawing tasks. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Hammer, E. F. (1953). An investigation of sexual symbolism: A study of H-T-P's of eugenically sterilized subjects. Journal of Projective Techniques. 17. 401-415.

Hammer, E. F. (1954). A comparison of H-T-P's of rapists and pedophiles. Journal of Projective Techniques, 18, 346-354.

Hammer, E. F. (1955). A comparison of H-T-P's of rapists and pedophiles: III. The "dead" tree as an index of psychopathology. Journal of Clinical Psychology, 11, 67-69.

Hammer, E. F. (1957a). Psychodynamic patterns of sex offenders: A four-factor theory. Psychoanalytic Quarterly, 31, 325-345.

Hammer, E. F. (1957b). A psychoanalytic hypothesis concerning sex offenders. Journal of Clinical and Experimental Psychopathology, 18, 177-184.

Hammer, E. F. (1958). The clinical application of projective drawings. Illinois: Charles C. Thomas, Publisher.

Hammer, E. F. (1968). Projective drawings. In A. I. Rabin (Ed.), Projective techniques in personality assessment. New York: Springer Publishing Company, Inc.

Handler, L. (1967). Anxiety indexes in the Draw a Person test: A scoring manual. Journal of Projective Techniques and Personality Assessment, 31, 46-57.

Handler, L. (1985). The clinical use of the Draw-A-Person test (DAP). In C. S. Newmark (Ed.), Major psychological assessment instruments. Boston: Allyn Bacon, Inc.

Handler, L. & Reyher, J. (1964). The effects of stress on the draw-a-person test. Journal of consulting psychology, 28, 259-264.

Handler, L. & Reyher, J. (1965). Figure drawing anxiety indexes: A review of the literature. Journal of Projective Techniques and Personality Assessment, 29,305-313.

Handler, L. & Reyher, J. (1966). The relationship between GSR and anxiety indexes in projective drawings. Journal of Consulting Psychology, 30, 60-67.

Harris, D. B. (1963). Children's drawings as measures of intellectual maturity: A revision and extension of the Goodenough Draw-A-Man test. New York: Harcourt, Brace & World.

Hartke, J. M. (1994). Castrating the phallic mother: The influence of Freud's repressed developmental experiences on the conceptualization of the castration complex. Psychoanalytic Review, 81, 641-657.

Hayward, E. P. (1943). Types of female castration reaction. Psychoanalytic Quarterly, 12, 45-66.

Healy, W., Bronner, A. F., & Bowers, A. M. (1930). The structure and meaning of psychoanalysis. New York: Alfred A. Knoph.

Holt, R. R. (1970). Manual for the scoring of primary process manifestations in Rorschach responses, 10th edition. Unpublished manuscript, Research Center of Mental Health, New York University.

Holt, R. R. (1977). A method for assessing primary and secondary process in the Rorschach. In M. A. Rickers-Ovsiankina (Ed.), Rorschach psychology (rev. ed.). New York: Krieger.

Horney, K. (1924). On the genesis of the castration complex in women. International Journal of Psychoanalysis, 5, 50-65.

Horney, K. (1926). The flight from womanhood: The masculinity complex in women, as viewed by men and by women. International Journal of Psychoanalysis, 7, 324-339.

Horney, K. (1932). The dread of women. International Journal of Psychoanalysis, 13, 348-360.

Huschka, M. (1938). The incidence and character of masturbation threats in a group of problem children. Psychoanalytic Quarterly, 1, 338-356.

Irwin, E. C., & Kovacs, A. (1979). Analysis of children's drawings and stories. Journal of the Association for the Care of Children in Hospitals, 8, 39-48.

Jackson, D. (1954). Some factors influencing the Oedipus complex. Psychoanalytic Quarterly, 23, 566-581.

Jacobson, E. (1937/1976). Ways of females superego formation and the female castration complex. Psychoanalytic Quarterly, 45, 525-538.

Jacobson, H. A., & Handler, L. (1967). Extroversion-introversion and the effects of stress on the draw-a-person test. Journal of Consulting Psychology, 31, 433.

Jaffe, D. S. (1977). The masculine envy of women's procreative function. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Jones, E. (1925). Mother-right and the sexual ignorance of savages. International Journal of Psychoanalysis, 6, 109-130.

Jones, E. (1927). The early development of female sexuality. International Journal of Psychoanalysis, 8, 459-472.

Jones, E. (1933). The phallic phase. International Journal of Psychoanalysis, 14, 1-33.

Kamil, L. J. (1970). Psychodynamic changes through systematic desensitization. Journal of Abnormal Psychology, 76, 199-205.

Kaplan, L. J. (1993). Fits and misfits: The body of a woman. American Imago, 50, 457-480.

Kaplan, L. J. (1994). Female castration anxiety. American Imago, 51, 471-489.

Karon, B. P. (1964). An experimental study of parental castration phantasies in schizophrenia. British Journal of Psychiatry, 110, 67-73.

Karon, B. P. (1970). An experimental study of parental castration phantasies. British Journal of Psychiatry, 117, 69-73.

Kestenberg, J. S. (1956). Vicissitudes of female sexuality. Journal of the American Psychoanalytic Association, 4, 453-476.

Kleeman, J. A. (1977). Freud's views on early female sexuality in light of direct child observation. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Klein, M. (1928). Early stages of the Oedipus conflict. International Journal of Psychoanalysis, 9, 167-180.

Kline, P. (1972). Fact and fantasy in Freudian theory. London: Methuen & Co., Ltd.

Kohut, H. (1977). The restoration of the self. New York: International Universities Press.

Koppitz, E. M. (1968). Psychological evaluation of children's human figure drawings. New York: Grune & Stratton.

Krausz, E. O. (1994). Freud's devaluation of women. Individual Psychology, 50, 298-313.

Kupfersmid, J. (1995). Does the Oedipus complex exist? Psychotherapy, 32, 535-547.

Kuppusawmy, B. (1949). Preliminary report of a statistical study of the Oedipus complex. Indian Journal of Psychology, 24, 23-25.

Lakatos, I. (1978). The methodology of scientific research programmes. New York: Cambridge University Press.

Lampl De Groot, J. (1927). The evolution of the Oedipus complex in women. International Journal of Psychoanalysis, 9, 332-345.

Lampl De Groot, J. (1933). Problems of femininity. Psychoanalytic Quarterly, 2, 489-518.

Lampl De Groot, J. (1952). Re-evaluation of the role of the Oedipus complex. International Journal of Psychoanalysis, 33, 335-342.

Lane, R. W. (1966). The effect of preoperative stress on dreams. Unpublished doctoral dissertation, University of Oregon, Eugene, Oregon.

Larison, G. R. (1974). The use of free imagery, non-directed interviewing, and selected drugs to lift posthypnotic repression. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Lasky, J. J., & Berger, L. (1959). Blacky test scores before and after genito-urinary surgery. Journal of Projective Techniques, 23, 57-58.

Laufer, M. E. (1986). The female Oedipus complex and the relationship to the body. The Psychoanalytic Study of the Child, 41, 259-276.

Lax, R. F. (1995). Motives and determinants of girls' penis envy in the negative Oedipal phase. Journal of Clinical Psychoanalysis, 4, 297-314.

LeBaron, S. (1976). Visual imagery and posthypnotic conflict in relation to psychopathology. Unpublished master's thesis, Michigan State University, East Lansing, MI.

LeBaron, S., Reyher, J., & Stack, J. M. (1985). Paternalistic vs egalitarian physician styles: The treatment of patients in crisis. The Journal of Family Practice, 21, 56-62.

Lerner, H. E. (1977). Parental mislabeling of female genitals as a determinant of penis envy and learning inhibitions in women. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Lerner, H. E. (1980). Penis envy: Alternatives in conceptualization. Bulletin of the Menninger Clinic, 44, 39-48.

Levin, R. B. (1966). An empirical test of the female castration complex. Journal of Abnormal Psychology, 71, 181-188.

Levy, I. (1995). The fate of the Oedipus complex: Dissolution or waning. International Forum of Psychoanalysis, 4, 7-15.

Levy, S. (1958). Projective figure drawing. In E. F. Hammer, The clinical application of projective drawings. Illinois: Charles C. Thomas, Publisher.

Lindon, J. A. (1992). A reassessment of little Hans, his parents, and his castration complex. Journal of the American Academy of Psychoanalysis, 20, 375-394.

Loewald, H. W. (1979). The waning of the Oedipus complex. Journal of the American Psychoanalytic Association, 27, 751-775.

Löfgren, L. B. (1968). Castration anxiety and the body ego. International Journal of Psychoanalysis, 49, 408-410.

Lorand, S. (1939). Role of the female penis phantasy in male character formation. International Journal of psychoanalysis, 20, 171-182.

Lubin, B., Wallis, R. R., & Paine, C. (1971). Patterns of psychological test usage in the United States: 1935-1969. Professional Psychology, 2, 70-74.

Machover, K. (1949). Personality projection in the drawing of the human figure. Springfield: Charles Thomas.

Machover, K. (1953). Human figure drawings of children. Journal of Projective Techniques, 17, 85-91.

Mahler, M. S. (1968). Comment on Dr. Löfgren's paper. International Journal of Psychoanalysis, 49, 410-412.

Malinowski, B. (1927). Sex and repression in savage society. Chicago: The University of Chicago Press.

Mandler, G. (1963). Parent and child in the development of the Oedipus complex. Journal of Nervous and mental Disease, 136, 227-235.

Mann, D. (1994). Castration Desire. British Journal of Psychotherapy, 10, 511-520.

Masson, J. M. (1984). The assault on truth: Freud's suppression of the seduction theory. New York: Farrar, Straus, & Giroux.

Mayer, E. L. (1985). "Everybody must be just like me": Observations of female castration anxiety. International Journal of Psychoanalysis, 66, 331-347.

Mayer, E. L. (1995). The phallic castration complex and primary femininity: Paired developmental lines toward female gender identity. Journal of the American Psychoanalytic Association, 43, 17-38.

McElhaney, M. (1969). Clinical psychological assessment of the human figure drawing. Illinois: Charles C. Thomas, Publisher.

Meehl, P. E. (1978). Theoretical risks and tabular asterisks: Sir Karl, Sir Ronald, and the slow progress of soft psychology. Journal of Consulting and Clinical Psychology, 46, 806-834.

Menninger, K. A. (1936). Somatic correlations with the unconscious repudiation of femininity in women. Journal of Nervous and Mental Disease, 89, 514-527.

Miller, J. B. (Ed.) (1973). Psychoanalysis and women. New York: Brunner-Mazel.

Moore, B. E. (1976). Freud and female sexuality: A current view. International Journal of Psychoanalysis, 57, 287-300.

Morishige, H. & Reyher, J. (1975). Alpha rhythm during three conditions of visual imagery and emergent uncovering psychotherapy: The critical role of anxiety. Journal of of Abnormal Psychology, 84, 531-538.

Mortensen, K. V. (1991). Form and content in children's human figure drawings. New York: New York University Press.

Moses, I., & Reyher, J. (1985). Spontaneous and directed visual imagery: Image failure and image substitution. Journal of Personality and Social Psychology, 48, 233-242.

Müller, J. (1931). A contribution to the problem of libidinal development of the genital phase in girls. International Journal of Psychoanalysis, 13, 361-368.

Murstein, B. I. (1965). Handbook of projective techniques. New York: Basic Books, Inc.

Myers, L. B. (1965). The clinical usefulness of stories told about male, female, and animal drawings. Unpublished master's thesis, Michigan State University, East Lansing, MI.

Nagera, H. (Ed.). (1975). Female sexuality and the Oedipus complex. New York: Aronson.

Neubauer, P. B. (1960). The one-parent child and his Oedipal development. The Psychoanalytic Study of the Child, 15, 286-309.

Nichols, R. C., & Strümpfer, D. J. W. (1965). A factor analysis of draw-a-person test scores. In B. I. Murstein (ed.), Handbook of projective techniques. New York: Basic Books, Inc.

Nunberg, H. (1955). Principles of psychoanalysis. New York: International Universities Press, Inc.

Ogdon, D. (1979). Psychodiagnostics and personality assessment: A handbook (2nd edition). Los Angeles: Western Psychological Services.

Olsen, O. A. (1995). The living and the dead father: Some Oedipal knots in the history of psychoanalysis. Psychoanalysis and Contemporary Thought, 18, 495-530.

Oster, C. J. (1996). Wish-fulfillment in dreams, individual spontaneous waking enactments, and group spontaneous waking enactments: Implications for Freudian theory. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Parens, H., Pollock, L., Stern, J., & Kramer, S. (1977). On the girl's entry into the Oedipus complex. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic views. New York: International Universities Press, Inc.

Platt, J. R. (1964). Strong inference. Science, 146, 347-353.

Pine, F. (1960). A manual for rating drive content in the TAT. Journal of Projective Techniques, 24, 32-35.

Pollitt, E., Hirsch, S., & Money, J. (1964). Priapism, impotence and human figure drawings. Journal of Nervous and Mental Disease, 139, 161-168.

Pollock, G., & Ross, J. (Eds.) (1988). The Oedipus papers. Madison, CT: International Universities Press.

Rabin, A. I. (1958). Some psychosexual differences between Kibbutz and non-Kibbutz Israeli boys. Journal of Projective Techniques, 22, 328-332.

Rado, S. (1933). Fear of castration in women. Psychoanalytic Quarterly, 2, 425-475.

Rangell, L. (1954). The role of the parent in the Oedipus complex. Bulletin of the Menninger Clinic, 19, 9-15.

Rangell, L. (1991). Castration. Journal of the American Psychoanalytic Association, 39, 3-23.

Rapaport, D., & Gill, M. M. (1959). The points of view and assumptions of metapsychology. International Journal of Psychoanalysis, 40, 153-162.

Reich, W. (1931). The characterological mastery of the Oedipus complex. International Journal of psychoanalysis, 12, 452-467.

Reyher, J. (1959). Use of figure drawings in differential diagnosis. Paper presented at the State Diagnostic Conference, Michigan.

Reyher, J. (1977). Spontaneous visual imagery: Implications for psychoanalysis, psychopathology, and psychotherapy. Journal of Mental Imagery, 2, 253-274.

Reyher, J. (1978). Emergent uncovering psychotherapy: The use of imagoic and linguistic vehicles in objectifying psychodynamic processes. In J. L. Singer & K. S. Pope (Eds.), The power of human imagination (pp. 51-93). New York: Plenum Press.

Reyher, J. (1985). Assessing the contra-coup in human figure drawings. Unpublished manuscript, Michigan State University, East Lansing, MI.

Reyher, J. (1988). Transforming manifest content into latent content. Unpublished manuscript, Michigan State University, East Lansing, MI.

Reyher, J. (1989). Freud's models of the psyche. Unpublished manuscript, Michigan State University, East Lansing, MI.

Reyher, J. (1993a). The Lakatosian perspective and accessing the Freudian domain. Unpublished manuscript, Michigan State University, East Lansing, MI.

Reyher, J. (1993b). Drawing the human body: Accessing the Freudian domain. Unpublished manuscript, Michigan State University, East Lansing, MI.

Reyher, J. (1997). Reyher on Hamernik and Tobias: A new look. Unpublished manuscript, Michigan State University, East Lansing, MI.

Reyher, J., & Smeltzer, W. (1968). The uncovering properties of visual imagery and verbal association: A comparative study. Journal of Abnormal Psychology, 73, 218-222.

Ritz, M. B. (1969). The relationship between Oedipal conflicts and pre-operational functioning in aggressive boys during the latency period. Unpublished doctoral dissertation, Case Western Reserve University, Cleveland, OH.

Roach, J. P. (1981). The effect of an experimenter's presence or absence during administration of the draw a person test. Unpublished master's thesis, Michigan State University, East Lansing, MI.

Roach, J. P. (1984). The effect of an experimenter's presence on the quality of interpretable data in human figure drawings. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Roback, H. (1968). Human figure drawings: Their utility in the clinical psychologist's armamentarium for personality assessment. Psychological Bulletin, 70, 1-19.

Róheim, G. (1950). Psychoanalysis and anthropology. New York: International Universities Press.

Róheim, G. (1952). The anthropological evidence for the Oedipus complex. Psychoanalytic Quarterly, 21, 537-542.

Roiphe, H., & Galenson, E. (1972). Early genital activity and the castration complex. Psychoanalytic Quarterly, 41, 334-347.

Rosberg, J. & Karon, B. P. (1958). The Oedipus complex in a case of deteriorated schizophrenia. Journal of Abnormal and Social Psychology, 57, 221-225.

Ross, J. M. (1982). Oedipus revisited: Laius and the "Laius complex." The Psychoanalytic Study of the Child, 37, 169-200.

Sacks, M. H. (1985). The Oedipus complex: A reevaluation. Journal of the American Psychoanalytic Association, 33, 201-216.

Saltzstein, S. B. (1970). The relationship between Oedipal conflict and castration anxiety as a function of repressive and sensitizing defenses. Unpublished doctoral dissertation, New York University.

Sanders, R. & Reyher, J. (1972). The clinical applicability of nude figure drawings. Journal of Personality Assessment, 36, 254-262.

Sarnoff, I., & Corwin, S. M. (1959). Castration anxiety and the fear of death. Journal of Personality, 27, 374-385.

Schaeffer, D. L. (1968). Addenda to an annotated bibliography of the Blacky Test (1949-1967). Journal of Projective Techniques and Personality Assessment, 32, 550-555.

Schafer, R. (1954). Psychoanalytic interpretation in Rorschach testing. New York: Grune & Stratton.

Schafer, R. (1974). Problems in Freud's psychology of women. Journal of the American Psychoanalytic Association, 22, 459-485.

Schill, T. (1966). Sex differences in identification of the castrating agent on the Blacky test. Journal of Clinical Psychology, 22, 324-325.

Schneider, S. S. (1960). An analysis of presurgical anxiety in boys and girls. Unpublished doctoral dissertation, University of Michigan.

Schrut, A. H. (1994). The Oedipus complex: Some observations and questions regarding its validity and universal existence. Journal of the American Academy of Psychoanalysis, 22, 727-751.

Schuker, E., & Levinson, N. A. (Eds,) (1991). Female psychology: An annotated psychoanalytic bibliography. Hillsdale, N.J.: Analytic Press.

Schwartz, B. J. (1955). The measurement of castration anxiety and anxiety over loss of love. Journal of Personality, 24, 204-219.

Schwartz, B. J. (1956). An empirical test of two Freudian hypotheses concerning castration anxiety. Journal of Personality, 24, 318-327.

Schwartz, B. (1991). The clinical concept of castration anxiety and its application in short-term dynamic psychotherapy Part I: Current status of castration anxiety. International Journal of Short-term Psychotherapy, 6, 57-78.

Sedlmeier, P., & Gigerenzer, G. (1989). Do studies of statistical power have an effect on the power of studies? Psychological Bulletin, 105, 309-316.

Serebriany, R. (1976). Dialogue on "Freud and female sexuality." International Journal of Psychoanalysis, 57, 311-313.

Shaw, R. (1995a). Female psychology: Historical myths, conceptual ambiguities, and current views: Notes of the need for revision of the psychoanalytic curriculum. Journal of Clinical Psychoanalysis, 4, 269-276.

Shaw, R. (1995b). Course Number 408: Current views of female psychology. Journal of Clinical Psychoanalysis, 4, 277-281.

Shaw, R. (1995c). Female genital anxieties: An integration of new and old ideas. Journal of Clinical Psychoanalysis, 4, 315-329.

Shill, M. (1981a). Castration fantasies and assertiveness in father-absent males. Psychiatry, 44, 263-272.

Shill, M. (1981b). TAT measures of gender identity (castration anxiety) in father-absent males. Journal of Personality Assessment, 45, 136-146.

Siegel, S. (1956). Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill.

Silverman, L. H. (1971). An experimental technique to the study of unconscious conflict. British Journal of Medical Psychology, 44, 17-25.

Silverman, L. H. (1976). Psychoanalytic theory: "The reports of my death are greatly exaggerated." American Psychologist, 31, 621-637.

Simon, B. (1991). Is the Oedipus complex still the cornerstone of psychoanalysis? Three obstacles to answering the question. Journal of the American Psychoanalytic Association, 39, 641-668.

Sinha, T. C. (1964). On castration. Samiksa, 18, 83-89.

Stärcke, A. (1921). The castration complex. International Journal of Psychoanalysis, 2, 179-201.

Steiner, J. (1985). Turning a blind eye: The cover up for Oedipus. International Review of Psychoanalysis, 12, 161-172.

Stephens, W. N. (1961). A cross-cultural study of menstrual taboos. Genetic Psychology Monographs, 64, 385-416.

Stephens, W. N. (1962). The Oedipus complex: Cross cultural evidence. Glencoe: The Free Press of Glencoe.

Stern, D. B. (1974). The uncovering properties of visual imagery, verbal associations with eyes closed and verbal associations with eyes open: A comparative study. Unpublished master's thesis, Michigan State University, East Lansing, MI.

Stern, M. M. (1952). Free paining as an auxiliary technique in psychoanalysis. In G. Bychowski & J. L. Despert (Eds.), Specialized techniques in psychotherapy. New York: Basic Books, Inc.

Stoller, R. J. (1977). Primary femininity. In H. P. Blum (Ed.), Female psychology: Contemporary psychoanalytic view. New York: International Universities Press, Inc.

Strouse, J. (Ed.) (1974). Women and analysis: Dialogues on psychoanalytic views of femininity. New York: Grossman Publishers.

Stufkens, A. (1990). Castration anxiety and pregenital development: A hypothesis on the protophallus. International Journal of Psychoanalysis, 71, 615-628.

Sturman, P. (1980). Derivatives o the castration complex in normal adults. Unpublished doctoral dissertation, St. John's University, New York, N.Y.

Sullivan, H. S. (1953). The interpersonal theory of psychiatry. New York: W. W. Norton and Company, Inc.

Swensen, C. (1957). Empirical evaluations of human figure drawings. Psychological Bulletin, 54, 431-466.

Swensen, C. (1968). Empirical evaluations of human figure drawings; 1957-1966. Psychological Bulletin, 70, 20-45.

Taulbee, E. S., & Stenmark, D. E. (1968). The Blacky Pictures Test: A comprehensive annotated and indexed bibliography (1949-1967). Journal of Projective Techniques and Personality Assessment, 32, 105-137.

Thompson, C. (1941). The role of women in this culture. Psychiatry, 4, 1-8.

Thompson, C. (1943). "Penis envy" in women. Psychiatry, 6, 123-125.

Tobias, R. J. (1993). Ego-ideal and superego differences among males and females. Unpublished doctoral dissertation, Michigan State University, East Lansing, MI.

Torsti, M. (1994). The feminine self and penis envy. International Journal of Psychoanalysis, 75, 469-478.

Tyson, P. (1986). Female psychological development. Annals of Psychoanalysis, 4, 357-373.

Van Der Sterren, H. A. (1952). The "King Oedipus" of Sophocles. International Journal of Psychoanalysis, 33, 343-350.

Van Ophuijsen, J. H. W. (1924). Contributions to the masculinity complex in women. International Journal of Psychoanalysis, 5, 39-49.

Waelder, R. (1960). Basic theory of psychoanalysis. New York: International Universities Press, Inc.

Weimer, W. B. (1979). Notes on the methodology of scientific research. New Jersey: Lawrence Erlbaum Associates, Publishers.

Whiting, J. W. M., Kluckhohn, R., & Anthony, A. (1958). The function of male initiation ceremonies at puberty. In E. E. Maccoby, T. M. Newcomb, & E. L. Hartleg (Eds.), Readings in social psychology (third edition). New York: Holt, Rinehart & Winston, Inc.

Wilkinson, S. M. (1991). Penis envy: Libidinal metaphor and experiential metonym. International Journal of Psychoanalysis, 72, 335-346.

Winnicott, D. W. (1957). Mother and child: A primer of first relationships. New York: Basic Books.

Winnicott, D. W. (1987). Babies and their mothers. Reading, MA: Addison-Wesley.

Young, R. M. (1994). New ideas about the Oedipus complex. Melanie Klein and Object Relations, 12, 1-20.

Zimbardo, P. G. (1969). The human choice: Individuation, reason, and order versus deindividuation, impulse, and chaos. Nebraska Symposium on Motivation, 17, 237-307.


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