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EGO-IDEAL AND SUPEREGO DIFFERENCES AMONG MALES AND FEMALES

By

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ABSTRACT

EGO-IDEAL AND SUPEREGO DIFFERENCES AMONG MALES AND FEMALES

By

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One hundred twenty subjects (60 males and 60 females) drew three objects (human male and female and auto) at-home. Eighty drew the same objects while attached to a polygraph in a laboratory (close monitoring) under either formal or informal conditions (style). Forty drew as a member of a group. Subjects in the laboratory condition completed an oedipal stimulus narrative and responded to the Blacky castration card. Other dependent measures included: graphic behaviors of anxiety (SGIs); graphic behaviors of libidinous intensification and doing a good job (EGBs), and blatancy of depiction of sexual anatomy (GSBS). subjects ratings were obtained in regard to experimenter personal power (PPFP), liking of the experimenter, and motivation to participate. Also selected subject's verbal protocols were scored for security measures.

Manipulation checks revealed that only the at-home and laboratory conditions were successful in regards to the graphic behaviors. Style was not. Under maximum ego-threat (close monitoring), subjects rated the experimenter as most powerful, most likeable, and eager to please. This operationalized a regressive transference. Libido (EGBs) and anatomical depiction were correlated. However, the

unreliability of the graphic behaviors and security measures over type of object was too great to permit a fair test of the experimental hypotheses. Also, the failure of the style manipulation was critical.

Males were libidinally more reactive than females. Also, males consistently showed a diminution of libido (EGBs) to the drawing of the female but showed a marked increase on the auto and male body. This is consistent with the mechanism of displacement.

Overall, the findings were more consistent with Freud's conception of the ego-ideal than the superego. The manipulation of ego-threat clearly affected the incidence of graphic behaviors, but they, nevertheless, were still present in the at-home condition. Whereas the superego requires autonomy, the ego-ideal is subject to both intrapsychic and extrapsychic sources of threat.

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INTRODUCTION

In their grouping of Freud's ideas into topographic and structural theories, Arlow and Brenner (1964) made no mention of narcissism in relation to the ego ideal (*Narcissism: an introduction*, Freud (1914/1986). Neither did Edelson (1988) nor Grunbaum (1986) in their specification of Freud's core ideas; nor did either of them comment on Arlow and Brenner's (1964) grouping of Freud's fundamental ideas (Reyher, 1990). Perhaps the vicissitudes of ego-ideal (EI) in the hands of Freud accounts for its idiosyncratic and divergent revisions by other psychoanalytic theorists (Alexander, 1948; Chasseguet-Smirgle, 1985).

Reyher (1990) noted that Freud abandoned this relation without comment in the *Ego and Id* - he considered the two constructs to be interchangeable - only to re-introduce it in *The New Introductory Lectures* (Freud, 1933/1986). As explicated by Freud (1914/1986), narcissism in relation to EI constitutes an alternative to theories advanced by social psychologists to explain the effect of an observer on performance, namely, social facilitation, social anxiety, and objective self-awareness. Its advantage over superego (SE) inheres in its sensitivity to the danger posed by the presence, even the mere presence, of others while exercising intrapsychic censorship functions. Whereas Freud emphasized

EI's extrapsychic orientation (commerce of the actual ego with the environment), SE is "the representative of the internal world, the id" (Freud, 1923/1986, p. 36). SE has limited conceptual reach.

It is important to keep in mind the distinctive etiology and modus operandi of EI and SE. EI is a parental image (imago) that was introjected to regain the renounced narcissism of infancy which thereby provides narcissistically inflated standards against which *conscience* measures the performance of the actual ego and which critically comments on the inevitable disparity between them. Freud did speculate on the etiology of conscience, but he was clear as to its purpose, which is to elicit (wrest) the love from EI that the actual ego seeks.

As a defense against castration by its Oedipal rival, the ego demolishes the Oedipus complex and incorporates the standards and values of its rival thereby allowing an institution (SE) of the psyche to form out of the id, one that now has these standards and values as its cornerstones. For this reason, SE is informed of insufficiently remote derivatives of Oedipal and pre-Oedipal wishes traversing the psychic apparatus, and it is able to use the destructive instincts against the ego as punishment.

Because drawing the human body and other stimulus objects before an observer links intra- and extrapsychic sources of influence on mentation and behavior, it enables

the researcher as well as the clinician to evaluate Freud's conceptualization of EI and SE or any other model that takes into account sources of internal and external influence. Consonant with the hegemony of Freud's structural theory amongst psychoanalytically oriented investigators in the heyday of projective testing, the fundamental or core assumption of projective tests, including the Draw-A-Person Test (DAP), was one-sided in that it focused solely on intrapsychic conflict (Reyher, 1986)., viz, "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" (Machover, 1949). To the extent that such a general psychoanalytic statement is realizable, the DAP must include a neutral comparison object, one that does not stir-up intrapsychic conflict to the same degree as drawing the human body.

To remedy the aforecited deficiency, Reyher (1959) recommended incorporating into the DAP a relatively neutral object of equal difficulty and familiarity against which to ascertain qualitative differences in graphic representation and identify informative asymmetrical distributions of graphic behaviors. An asymmetry in the distribution of a given graphic behavior across and/or within objects provides an inferential warrant for clinician and researcher alike, given the objects are equal in difficulty and familiarity,

which indeed turned out to be the case (Handler and Reyher, 1964).

The research literature on the DAP is deficient in another, more pernicious sense. Not only does the theoretical scaffolding of research vary across investigators, but the experimental hypotheses, the manipulations, or dependent measures used, are not derivable from it (Reyher, 1993a). Both Meehl (1978, 1979) and Dar (1987) have faulted research in psychology for this lack of cohesiveness in experimental design. Accordingly, the present investigator has striven to adhere closely to those early writings of Freud that bear on drawing the human body as at relates to EI and SE as well as selection of dependent measures and manipulation of independent factors.

Relevant Freudian Theory

Disguised wish fulfillment

The psychic apparatus enables repressed sexual instincts to find gratification via derivatives. Roach (1984) noted that each graphic behavior is multidetermined: even the most sensitive indices of extrapsychic anxiety are mediated intrapsychically. Not only is Freud's topographic theory hospitable to multidetermination (overdetermination), but it is the only theory that addresses the formation of derivatives (graphic representation of repressed wishes) in relation to the sexual implications (libido theory) of drawing the human body (Reyher, 1993b).

On Freud's (1923/1986) account, the ego is fundamentally a body ego; each organ, as well as the whole body and its parts is invested (cathected) with libido. Consequently, creating an object on paper activates whatever drives and strivings are embodied (cathected) in it. Moreover, the pencil becomes an extension of the hand. It touches the various parts of an object as it is being drawn, and, in so doing, provides a potential gratification outlet for whatever repressed wishes are stimulated. Because the auto is considered to be a derivative of the drawer's body, it should be less likely to be a source of conflict, unless it is insufficiently remote (too blatant) for a given individual (Reyher, 1986, 1993b).

Generally, the drawing of an auto should be less graphically disturbed than that of the human body. If this is the case, then an inference is warranted to account for the asymmetry. On Freud's (1915/1986) view of repression, asymmetry depicts a momentary resolution of intrapsychic conflict cued by the act of drawing a certain part of the body in relation to the prohibitory processes of the intersystemic censorship (Reyher, 1993b).

Egoistic graphic behaviors (EGB). Contrary to DAP lore, in three investigations, Handler and Reyher (1964, 1965, & 1966) found that the incidence of Erasure, Reinforcement, Shading, Hair Shading, and Emphasis Lines, the premier graphic indices of anxiety, decreased as anxiety

increased (Jacobson & Handler, 1967; Handler & Reyher, 1964, 1965, 1966; Roach, 1981). They appear to share considerable variance, and their closer association with the human body relative to the auto is in accordance with the operational definition of an intrapsychic source of influence. These findings suggest that EGBs are associated with less than acute anxiety: they do not appear during periods of disorganization (acute anxiety). As anxiety lessens (habituation), they are more likely to appear on the drawings. From a functional point of view, they improve the quality of the drawing, as does the use of Delineation Line (obverse of Delineation Line Absence) and detail (obverse of Detail Loss). Nevertheless, consonant with Freud, their rhythmic, stroking nature enables the discharge of libido. They are autoerotic and, therefore, anxiety-reducing in the same sense as rocking and thumbsucking.

If the presence of these graphic behaviors enhance the quality of sexual differentiation of the body, the sexual instincts in the psyche apparatus can be said to have advanced without the ego having been punished for its mediation of sexual gratification. If they are not used to improve the quality of the drawing, as in perseverative graphic reinforcement, they are autoerotic (anti-anxiety) behaviors. On Freud's (1926/1986) revised account of instincts and the genesis of conflict and psychopathology, the ego is the reservoir of the libido. Accordingly, EGBs

index ego-libido (narcissistic libido) as well as ego-interest, a combination of sexual and self-preservative instincts Freud (1937/1986) aptly called *egoism* (Reyher, 1986).

Of particular import are the electrodermal findings (Handler & Reyher, 1966) which show that EGBs are associated with a reduction in sympathetic tone - a decrease in anxiety instead of the expected increase. Reyher (1986) provisionally regards this reduction as an increase in parasympathetic tone which, of course, implies libidinal gratification (anabolism: appetitive drives, vegetative processes). Moreover, electrodermal activity habituated for these features, whereas the other indices (graphic behaviors depicting disorganization) did not. On this view, EGBs mediate gratification of an unconscious (repressed) wish that is activated by the drawing (touching) of the part involved. Investigation by Acheson (1972) and Graff (1967), described later, lend some credibility to these interpretations.

Under circumstances of overwhelming ego-threat, egoistic interest in doing a good job (narcissistic uplift) gives way to their anxiety-reducing function - a regressive method of coping. Acute anxiety posed by overwhelming ego-threat cues the self-preservative instinct of flight which in turn inhibits the advance of sexual instincts in the psychic apparatus (Freud, 1910/1986). Conceptualized this

way, EGBs either are a direct measure of gratification or anxiety-reduction.

Standard graphic indices of anxiety (SGI). With the exception of EGBs, all the graphic behaviors in DAP lore are called standard indices of anxiety (SGI), irrespective of presumed intrapsychic or extrapsychic source.

Egoistic verbal behaviors (EVB). Reyher (1992) recently has identified verbal behaviors that serve egoistic functions and are accompanied by well-being and anxiety reduction. These mastery-dominant (take-charge) interpersonal behaviors are thought to originate in a strong ego's ability to rebel against conscience (Freud's *counter-will*) and thereby obtain egoistic gratification (Reyher, 1992). These include such verbal behaviors as interruption, sentence-finishing, and repartee.

Submissive verbal behaviors (SVBs). The foregoing egoistic displays are in contrast to submissive-placating interpersonal verbal behaviors (SVB) which are not associated with well-being and are accompanied by anxiety. It is these indicators of narcissistic injury that are most likely to accompany the monitored drawing of stimulus objects (Roach, 1984). Freud (1926/1986) called them security measures. (*Security operations* is Sullivan's comparable term [see Gavrilides, 1980; Reyher, 1979, 1992] on security operations). Submissive-placating verbal behaviors (security measures) putatively originate during

those moments when the reactivity of conscience to an observed discrepancy between some aspect of one's physical self and/or performance, on the one hand, and the narcissistically inflated standards of EI on the other, seems imminent. These typically include, rationalizations, excuses, justifications, deference, obsequiousness and self-effacement, submission, compliance, appeasement, avoidance, and quitting.

Superego

In contrast to the bi-directional orientation (both inward and outward) of EI, the orientation of SE is solely inward/intrapsychic), originating in either the aftermath of the repression or destruction of the Oedipus complex by an ego strengthened by identification with actual and abandoned objects (Freud, 1923/1986, p. 34) It stands in oversight of the ego's relationship with the id. It reacts when the ego allows too blatant derivatives of repressed wishes to traverse the apparatus. When the ego fails to ensure sufficient disguise, the aggressive reaction of SE is experienced by the ego as guilt. SE is the embodiment of paternal standards and values - a "substitute for the longing of the father." (p. 37) - as well as an enforcing agency.

The conceptual vicissitudes of SE. The functions of SE became confused in Freud's (1933/1986) later writings when he averred that SE is the vehicle of the ego ideal; it

ensures that narcissistic satisfaction (supplies) is obtained from EI (Freud, 1933/1986). EI is clearly separated from SE whose principle function now is enforcement (see Editor's footnote, Freud, 1917/1986, p. 529). This harkens back to his original conception of the relationship between EI and the voice of conscience, It "performs the task of seeing that narcissistic gratification is secured from the ego-ideal, and that, with this end in view, it constantly watches the real ego and measures it by that ideal." (Freud, 1914/1986, p. 95). In *The Ego and Id* (Freud, 1923/1986) EI was merely a reaction formation, and it is safe to say that EI was conceptually absorbed by SE.

The Ego-ideal

The ego ideal is conceptually slippery because its origin, purpose, functions and relative autonomy changed over time. Nevertheless, the core of EI, like SE, is created out of phylogenetic (fear of the tribal chieftain in our archaic heritage) and ontogenetic (abandoned libidinal object cathexes) residues which prepare the way for identification via introjection. Our personal history provides identifications that shape the primitive core.

In Freud's seminal work on EI, *On Narcissism: an introduction*, its creation is initiated by the infantile ego's recognition of its helplessness and dependence upon caregivers, its subsequent renunciation of its primary narcissism (omnipotence and perfection of being), and the

installation of someone else to serve as its ideal (ego ideal) - a "displacement of libido on to an ego-ideal imposed from without" (Freud, 1914/1986, p. 100) - followed by a vigorous life-long attempt to recover it and thereby eradicate this festering narcissistic wound. Consequently, its renunciation of primary narcissism notwithstanding, the ego's narcissistic strivings cannot be abrogated.

The ego attempts to regain its omnipotence and perfection (primary narcissism) by introjection (oral incorporation) of the most powerful parent (the one that is most demanding and critical), usually the father; there is a grade (differentiation) in the ego that did not exist before. The standards of the incorporated parent, an imago situated inside the ego as EI, are inflated by the same narcissistic strivings (omnipotence and perfection) that were renounced; consequently, the objective parameters of the actual (real) ego/self, including its performance, can never measure-up. The ego emulates EI "whose demand for ever greater perfection it strives to fulfill" (Freud, 1917/1986, p. 421). Its standards are unrealistic and unobtainable (Reyher, 1992).

Conscience. An internal critic or *voice of conscience* "performs the task of seeing that narcissistic gratification is secured from EI and that, with this end in view, it constantly watches the real ego and measures it by that ideal" Freud, 1914/1986, p. 95). Conscience compares the

standards of EI against whatever aspect of the actual ego is relevant to attaining or not attaining EI (obtaining narcissistic supplies). On this view, the inherent disparity between the actual ego and the narcissistically inflated standards of EI guarantees that the voice of conscience will evaluate its accomplishments negatively, despite the accolades of one's peers, i.e. "It was not perfect. I know I can do better." But even when it is attained, the satisfaction is chimerical. The ego's quest to "wrest" narcissistic supplies from EI, attaining its ideal, never ceases.

Gratification occurs upon the ego's attainment of EI, "something in the ego coincides with the ego ideal" (p. 100). However, this something must be nonobjective, a value or sentiment (Reyher, 1990). Commerce of the real or actual ego/self with the environment is particularly problematical because such commerce provides operations (performance) for which evaluative criteria is objective.

Freud (1914/1986) also made it clear that EI was decisive in regard to repression. Conscience faces both inward and outward. Reyher (1986) proposed using the term *intrapersonal* to designate the intra-ego domain or realm of EI, to distinguish it from intrapsychic domain of SE.

Narcissism and narcissistic injury

Narcissistic uplifts and injuries take place in Freud's (1914/1986, 1917/1986) domain of the self-preservative

instincts; namely, egoism (seeking an advantage) and the ego interests. However, the realistic limitation of the actual ego doom it to expect injury rather than uplift. Freud's formulation of EI explains the observer's power and the threat of imminent injury. Given that the observer is sighted, present, and watching, conscience is cued when the observed person knows that he or she is unskilled in a task or is insufficient with respect to some socially valued personal attribute. Conscience measures the actual ego (Freud, 1914/1986) with respect to its unattainable ideal, and the psychic pain (mortification) is proportional to the discrepancy. The demand of conscience for perfection is more paternal than maternal, for both genders (Freud, 1923/1986). Apropos to this, Cottrell, Wack, Sekerak, and Rittle (1968) found that the blindfolded observer did not produce facilitation. Therefore, if the experimenter were blindfolded or in an adjoining room, there ought to be less anxiety even though participants know that he/she eventually will see the drawings. What is valued is ascertained from the context of the encounter (i.e., laboratory, employment interview) and cues provided by the observer's/ experimenter's demeanor, attire, and explicit and implicit in his or her values.

Owing to the verdict of conscience, the mortification and fear of the now looming EI may account for the small drawings of the human body, relative to the drawing of an

automobile, that is displaced toward the edge of the paper (Reyher, 1959) and the impoverishment of detail under conditions of high ego-threat (Handler & Reyher, 1964; Roach, 1981). Geen (1989, 1991), using other methods, also noted that subjects under laboratory conditions (induced failure) remain when they otherwise would leave, if they could.

Flight is cued under unmanageable excitation (high ego-threat), and what constitutes unmanageable threat is idiosyncratic. Some subjects experience an impetus to flee under experimental conditions of low ego-threat, whereas others do not evidence this under high ego-threat. The paper image tends to be small and move off center (Handler & Reyher, 1964; Roach, 1981). Those subjects who are not overwhelmed with excitation (anxiety) continue to employ EGBs.

Power

How does the observer derive his or her power? Freud's conceptualization of transference does not apply to transient, happenstance, human encounters, and he never used projection is his discussions of EI and transference, for that matter (Reyher, 1990). Nonetheless, most contemporary psychoanalytic theorists would say that conscience is projected onto observers. In keeping with Freud's terminology and his view that the ego is fundamentally a body ego, Reyher (1990) suggested that conscience is

activated whenever the ego detects someone looking at it, especially when feedback is involved. This is an extrapsychically cued intra-ego (intrapersonal) reaction. The term intra-ego is appropriate because EI is a modification (grade) in the ego. This is consistent with research on social facilitation, social anxiety, and objective self-awareness that shows the intensity of aversive reactions in the observed person is a direct function of the power of the observer (Schlenker & Leary, 1982; Wicklund, 1975) and negativity of feedback (Knowles, 1989).

Of cardinal significance for the purpose of the present investigation, power is an inverse function of proximity/distance (Knowles, 1989). Accordingly, the ego must employ security measures to eliminate or minimize narcissistic injuries by powerful and potentially harmful others, i.e., those who would fail to corroborate our narcissistic strivings must be placated or attacked.

Formality in demeanor emphasizes the power implicit in high rank and status whereas informality - a casual, relaxed demeanor - deemphasizes the potential threat implicit in power - with the intent to put lower ranking individuals at ease (Reyher, 1990). Accordingly, EI should be more responsive to the manipulation of proximity and formality in the demeanor of the experimenter.

Gender is especially influencing (power-conferring) if

the observer is an attractive, sexual object (*idealization*, [Freud, 1914/1986]). The dominance/power of the observer also is a factor because it intensifies feelings of insufficiency in the person observed and thereby increases the disparity between the actual ego and its ideal. The criticalness of conscience is proportional to the magnitude of this disparity. Thus, in accord with EI, gender of drawing, gender of participant, gender of experimenter, and presence versus absence of the experimenter ought to influence the graphic representation of an object, especially a human body.

The putative stimulation of repressed wishes while drawing the human anatomy complicates interpretation because both gratification and prohibition for the obtained gratification take place simultaneously. An attractive and sexually provocative experimenter ought to favor less distortion in sexual content of drawings, whereas his or her stern appearance and gruff demeanor should increase prohibition-punishment in reaction to repressed wishes that are stimulated by drawing (touching) the sexual anatomy. A number of studies are in accord with this view (Hamernik, 1985; Jacobson & Handler, 1967; Paludi & Bauer, 1979; Roach, 1981, 1984), but one notable exception (Holtzman, 1952) is in accord with SE - the examiner was not influencing.

Compensatory behavior

Compensatory adjustments to narcissistic injuries of

early childhood - the discovery of sexual, physical, and cognitive inadequacies - also are activated under ego-threat, i.e., macho/powerful male and auto drawings by males and beautified female drawings by females. In a variety of contexts, Freud (Reyher, 1992) referred to the counter-will: EI or SE can be overthrown along with its external representative for a short period of time as in festivals and the manic phase of manic-depressive disorders (See Brehm & Brehm [1966] Psychological Reactance]).

When the actual ego perceives itself as more powerful or possessing an advantage over another, its egoism prevails and it takes charge and thereby experiences a narcissistic uplift - an increase in self-regard (Reyher, 1992).

Manipulating ego-threat

Freud (1900/1986) maintained that the fundamental task of the nervous system (ego) is the mastery of stimuli; unmastered stimuli, overwhelming excitation, signals the onset of a traumatic state. Accordingly, there is a continuum of manipulations that varies from little or no threat to severe and catastrophic threat (Reyher, 1986). This continuum is anchored at its extremes by conditions that ensure privacy and anonymity at one end and conditions that bring shame or ignominy (public disgrace) at the other.

Bypassing the self-observing ego. Social psychologists commonly manipulate ego-threat by providing bogus negative feedback and insults by an observing experimenter. Inducing

objective self-awareness (social anxiety) is considered to constitute moderate to strong ego-threat. So are methods that bypass the self-observing functions of the ego (Freud, 1914/1986). Hypnosis poses such a threat (Wilson and Reyher, 1975; Reyher, 1986). Similarly, the polygraph can be regarded as an extension of an observer's ability to appraise nonconscious aspects of the subject's ego. He or she is about to gain unauthorized access to personal information. The self-observing function of the ego and its utilization of security measures to guard against narcissistic injuries (Freud, 1926/1986; Reyher, 1992) is bypassed. Only one security measure is available under this kind of threat (ego-threat): Rather than passively being exposed by the now transcendentally powerful experimenter, the ego actively self-discloses. Roach (1984) reported that 75% of his subjects were self-derogating under circumstances of attentive experimenter only (no polygraph). Thus, a piece of apparatus, an extrapsychic source of anxiety, piques conscience and thereby poses a threat to the ego. Social psychologists (Jones & Sigall, 1971) call such a truth divining device a <u>bogus pipeline</u>.

Relevant research on figure drawings

Extrapsychic effects

Freud (1900/1986) acknowledged that the content of perception can alleviate unconscious (repressed) wishes.

Symmetry of effects across stimulus objects. An

extrapsychic (situational) source is defined operationally when a graphic feature differentiates between levels of threat on all drawings. (See Acheson [1972] for examples). The number of indices increased for all three drawings.

In their investigation (males only) into the effect of ego-threat (high: polygraph monitoring versus unattended, anonymous group drawing) on the graphic representation of stimulus objects (human bodies and auto), Handler and Reyher (1966), counterbalanced level of ego-threat. All three drawings showed a substantial increase in graphic indices of anxiety, a review of the literature (Handler & Reyher, 1965) on graphic indices of anxiety was highly consistent with these findings.

An inspection of these indices suggests a gross disturbance in the organization of behavior cued by the situation. They are characterized by incompleteness and insufficiency on organization integration/integrity of the drawing (Reyher, 1986). Their hurried performance and debilitation gave Handler the impression that they wanted to flee the situation, viz, diminution of effort, articulation, impoverishment of detail, small size, and displacement off the center of the paper. (A similar syndrome has been reported in social facilitation research [Geen, 1989]). In fact, many of the drawings were so debilitated that they suggested severe psychopathology or intracranial pathology (see Acheson [1972] for examples).

Jacobson and Handler (1967) successfully replicated the above findings using the same design (females only). They also found that order of condition was influencing. For the human bodies, the high-low ego-threat order was more productive of graphic disturbance than low-high ego-threat; however, the results for the auto were anomalous - the effect was in the *opposite* direction.

Roach (1981) also used a balanced design with respect to gender of subject, gender of participant, and presence/absence of the experimenter under conditions of high ego-threat (polygraph monitoring) and also successfully replicated the findings of Handler and Reyher (1964) supra.

Most impressively, a review of the DAP literature (Handler & Reyher, 1965) revealed that the same graphic behaviors sorted themselves into SGIs, consistent with clinical lore, and EGBs.

Intrapsychic effects

A psychosexual intrapsychic source of influence is defined operationally when there is one or more asymmetries between the two human bodies and the auto. (See Acheson [1972] for examples). A gender linked source of disturbance is logically warranted when there are one or more asymmetries between the two human bodies.

Asymmetry - contrasts between humans and autos. Research findings are ambiguous insofar as the pertinent statistics have been reported. Designs (Acheson, 1972;

Graff, 1967; Hamernik, 1985; Handler & Reyher, 1966; Roach, 1984) that do not vary ego-threat substantially (polygraph versus no polygraph), but which use only one level of ego-threat, must rely on the difference in intrapsychic threat (stimulation of repressed wishes) posed by the human bodies and the auto. Hamernik (1985) reported that five of the seven graphic behaviors that entered into main effects were incoherent with respect to stimulus object (animal, auto, human male, human female) and Roach (1984) found that type of stimulus object tended to enter into significant interactions with order. Ignoring the possibility of interaction between scoring criteria and type object, these findings are consistent with displacement of libido across objects under threat (Reyher, 1958). Unfortunately, this core Freudian construct remains as a potential source of unreliability.

Electrodermal measures also have varied from unambiguous (Handler & Reyher, 1965; Sanders & Reyher, 1972) to ambiguous (Acheson, 1972; Hamernik, 1985; Roach, 1981). To account for his unimpressive results at a high level of ego-threat, Handler (1967) adduced evidence consistent with the notion that high ego-threat washes-out differences among drawings with respect to these indices. This outcome highlights the possibility that high ego-threat can disorganize executive ego functions. On Freud's (1926/1986) view, the fundamental task of the nervous system is to

master stimuli. A condition of helplessness is the ego's cue for anticipating overwhelming excitation reminiscent of birth - the onset of a traumatic state.

Asking subjects to draw nude human bodies (touch naked anatomy) as well as clothed bodies creates a contrast in ego-threat between the two classes of human bodies. Indeed, nude drawings are associated with greater electrodermal activity than clothed drawings, each class was greater relative to the auto (Sanders & Reyher, 1972).

Asymmetry - contrasts within object. A graphic behavior is not distributed uniformly over a given object. A sexual inference is documented by an asymmetry of the graphic and electrodermal indices across the nonsexual, secondary sexual, and primary sexual characteristics (regions) of the human body (Handler & Reyher, 1966; Sanders & Reyher, 1972). Drawing the sexual anatomy, with the exception of the shoulders on the male when drawn by a male, reliably produces the greatest reaction (conflict: presumably the activation of repressed sexual wishes) in the presence of the experimenter. By the same token, the drawing of shoulders by males on the male figure suggests anxiety concerning prowess/power; namely, weakness and insufficiency under the circumstances of testing.

Asymmetry - across levels of ego-threat. Research findings are skewed toward being unambiguously favorable (Handler & Reyher, 1964; Roach, 1981), with one mixed

(Jacobson & Handler, 1967), and one negative (Roach, 1984) finding. In the mixed finding, the effect was in the *opposite* direction, and in the negative finding the auto differentiated levels of ego-threat *better* than the human bodies.

Asymmetry - across gender. For male subjects, graphic and electrodermal indices were greater for male than female drawings (Handler & Reyher, 1964, 1966), but this finding for either measure has failed replication (Acheson, 1972; Hamernik, 1985; Roach, 1981). However, Roach (1981) found that males spent more time on the body of opposite gender from the first drawn, which was usually a female, and on the auto. The marked variation of EDA across experiments for the drawing of the opposite gender could be related either to variation in status/power or to the sexual attractiveness of the experimenter. The degree of displacement off center was greater when the experimenter was male. Displacement off center is an operational definition of overwhelming ego-threat.

Asymmetry - across groups. Both clinicians and researchers most likely are interested in asymmetries across contrasting groups of individuals. Ellch (1966) compared socially withdrawn and nonwithdrawn hospitalized psychotics and found, surprisingly, that the latter's drawings were debilitated. The drawings were similar to student participants under high ego-threat. Their drawings were

smaller, further displaced from center of the page, less detailed, and completed more hurriedly. In fact, the drawings from some participants, students as well as high sociable patient, gave the appearance of a modulated panic state. Other drawings appeared to be regressed (childlike).

Acheson (1972) divided her group of college-age male participants on the basis of their use of EGBs (coping versus noncoping). She found that copers (high EGBs) and noncopers differed nonsignificantly in the expected direction on 15 out of 17 dimensions. Germane to our present concerns, copers took a longer time, displayed more aggression, and had significantly less EDA.

Graff (1967) compared children (7th grade males) described as being behavior problems (BP children) with children not so labeled (NBP children). The two groups of children define a dimension of drive gratification. Relative to NBP children, BP children displayed uniformly more EGBs (shading, erasure, reinforcement) and indicators of aggression in the content of the figures.

Thus, in accord with Freud, both Acheson and Graff found aggression to be gratifying and mediated by EGBs.

Asymmetry - size and placement - intimidation and flight. Asymmetries involving only the same-sexed drawing and the auto at a given level of ego-threat suggests that there was sufficient loss in self-regard associated with the intimidation by the experimenter to motivate flight. Size

and placement seem to be indicators of intimidation and flight, respectively. The paper image tends to be small and move off center (Handler & Reyher, 1964; Roach, 1981). One interaction (Roach, 1981) in particular was intriguing: the degree of displacement off center (flight from the experimenter) was greater when the experimenter was male (intimidation). Reyher (1989) contends that this intimidation induced reduction in self-regard is associated with a decrease in the size of the primordial ego (Freud, 1915) and retreat (displacement off center). The image on paper is presumed to be isomorphic with the momentary state of the body image (primordial ego/body ego)

A link to the male drawer's body image is implicated by an interaction between size, and sex of drawing (Handler and Reyher, 1964). The male body was smaller when the ego-threat condition was first then when it was second; however, the order of the drawings was not counterbalanced.

Time on drawing may be the best indicator of flight under conditions of high ego-threat (Ellch, 1966; Hamernick, 1958; Roach, 1981, 1984). Otherwise time appears to be an indicator of degree of involvement (gratification) with the drawing (Acheson, 1972). Hamernick (1985) reported that her subjects spent more time on the human bodies than the animal and auto.

Asymmetry - interactions. Each interaction specifies an asymmetry. Freud's research program is predicated on

interactions because of critical gender differences in sexual aims and development of instinct-restraining processes. Of coordinate importance, the intrapsychic source of influence on graphic representation of the human body is an interplay between wish fulfillment and prohibition/punishment of the resolution which may differ from moment-to-moment - repression is specific, variable, and mobile. This would account for the bewildering welter of interactions peculiar to those investigations that utilize balanced designs with respect to gender of both subject and experimenter (see below).

In their investigations, Handler and Reyher (1964) neither varied the sex of participants nor experimenters, but Roach (1981) did both, and he successfully replicated Handler and Reyher's (1964) finding of a disproportionate increase in scorable graphic behaviors on the drawings of the human body, under conditions of high ego-threat.

However, interpretation of 23 significant unpredicted main effects and interactions cannot be composed by the psychometric model he employed in dimensionalizing the sensitivity of the various graphic indices to intrapsychic and extrapsychic sources of influence. Most of these are amenable to the views of Freud currently under examination. Some graphic features in the drawings were linked to ego-threat (experimenter power), gender of participant, type of drawing, and gender of experimenter. The same triple

interaction (experimenter presence/absence, gender of subject, gender of experimenter) occurred on five graphic indicators.

Rates of spontaneous electrodermal activity varied across experimenters (differences in personal power) for the drawing of opposite gender (presumed differences in personal power and/or sexual objects?), and males spent more time drawing (presumed greater sexual gratification?) the female body and auto than the male body. Freud (1915/1986) assigned active sexual aims to males, passive ones to females. Males move toward and lay hold their sexual object, with the aim of penile penetration. The auto, of course, enshrines phallic aggression. Hamernick (1985) found gender differences on electrodermal measures and complex interactions on measures of person perception, when participants and experimenters rated each other.

Conclusion.

The foregoing review indicate that extrapsychic sources of influence (experimenter plus apparatus) have powerful effects on subjects' drawing of stimulus objects and that the asymmetries in the distribution of graphic features associated with variation in these objects (human versus inanimate) also is influential. Therefore, Freud's (1914/1986) construal of EI is far superior to his construal of SE insofar as their respective abilities to accommodate (explain) the results of laboratory research on figure

drawings, even those in the domains of social facilitation, social anxiety, and objective self-awareness. They cannot be compared head-to-head because they are interchangeable, not separate, copresent psychic entities. They are alternative (rival), theoretical constructs (Reyher, 1990).

Overview of experimental design

The experimental hypotheses treated EI and SE as rival theories (Edelson, 1986, 1989), each generating deductions (hypotheses) concerning data obtained from different subject-performances (figure drawings, story-telling to structured stimuli, completing a stimulus narrative), obtained under different settings (home, laboratory, group), and analyzed by source-appropriate methods.

Overall, the results are expected to converge on the question of relative dependence/autonomy of subject's performances with respect to environment (the experimenter plus situation) and with respect to the intrapsychic domain (repressed sexual wishes). (These are the *relative autonomies* that constitute the theoretical core of psychoanalytic ego psychology [Gill & Brenman, 1967]). They also will bear critically on SE in regard to the specificity of etiological factors (incestuous wish and male castration anxiety) in its creation and maintenance.

Gratification was indexed by egoistic graphic and verbal behaviors (EGBs and EVBs) whereas anxiety was indexed by standard graphic indices of anxiety (SGIs) and

submissive-placating verbal behaviors (SVBs).

Establishing continuity with earlier investigations was also of interest.

Experimental hypotheses

Hypotheses were formulated to explore systematically the effects of variables theoretically related to the constructs of EI and SE. With respect to EI this includes, power of experimenter, bypassing the self-observing functions of the ego, and proximity of experimenter. With respect to SE this includes, type of drawing, gender of subject, completing the stimulus narrative, and story-telling to structured stimuli.

Hypothesis I. Conscience (the disparity between the actual ego and the ego ideal) reacts aggressively toward the ego in direct proportion to degree of ego-threat, as indexed by (a) power and (b) proximity of an observer.

This hypothesis applies to whatever aspect of the actual ego is salient, irrespective of sexuality; hence, a non-sexual task, the relatively neutral auto, provides a critical test for differentiating between EI and SE. It should be associated with more SVBs during drawing skill evaluation, and more SGIs on the drawings in high ego-threat than low ego-threat.

The contribution of power (intimidation) was assessed by comparing the formal (F) and informal conditions (I), P (prediction): F > I; and the contribution of proximity was

assessed by comparing the high ego-threat laboratory (HL) condition, irrespective of experimenter style, with low ego-threat group (LG) condition, P: HL > LG. Only graphic behaviors were applicable. Positive outcomes are consistent with EI but not SE; negative outcomes are consistent with SE but not EI.

To acquire information on the character of the relationship between adequacy of graphic representation and narcissistic injury in relation to ego-threat, the conditions under which drawing took place were ordered in terms of presumed degree of ego-threat: at home; non-monitored group; informal polygraph-monitored laboratory setting; and formal polygraph-monitored laboratory setting. The graphic indices and verbal measures are expected to decrease progressively over degree of ego-threat and perhaps be distinctive for type of drawing, same-sexed drawing and opposite-sexed drawing.

Hypothesis II. The superego reacts aggressively toward the ego in direct proportion to the activation of (a) autoerotic and/or homosexual wishes and (b) incestuous wishes.

The separate contribution of (a) and (b) to conflict was assessed by comparing correlations involving the same-sexed (SS) body and the opposite-sexed (OS) body with the auto, P: SS > A; OS > A.

The selection of EGBs as a key dependent measure is

based on two considerations: (1) the finding that they are negatively correlated with electrodermal activity and (2) the assumption that drawing human bodies is sensually (libidinously) gratifying, even when sexual anatomy and/or sexual arousal is not depicted.

On Freud's topographic theory, EGBs index the arousal of sexual wishes (interests) and SGIs index their anxiety-producing effects (Reyher, 1986), viz, repressed wishes cue anxiety to a degree commensurate with their intensity. The intensity of repressed wishes was manipulated by including a request for subjects to draw objects high (human body) and low (auto) in their sexually activating properties. However, each of the human drawings is associated with different sexual wishes for the drawer; consequently, intensity is confounded with type of wish, to wit, autoerotic and/or homosexual wishes are activated and gratified by drawing the same-sexed body and incestuous wishes are activated and gratified by drawing the opposite-sexed body.

Habituation is another confounding variable which, fortunately, works against the prediction of the auto having fewer SGIs than the human bodies. The drawing of the auto was always first, followed by the counterbalanced drawing of the male and female bodies.

Under the at-home condition, ego-threat is less, perhaps minimal, than any of the other condition in the

study. Low ego-threat allegedly removes or lessens inhibition due to activated self-preservative instincts. Accordingly, the at-home condition provides the best single test of SE autonomy: There still should be SGIs on the human bodies; the incidence of EGBs and SGIs on the human bodies ought to be proportionate (conflict) and, in addition, proportionately greater than the auto.

If SE is not autonomous, than relative to the other condition, the drawings of the human body at-home should be associated with the highest incidence in the depiction of sexual anatomy and EGBs; and, of critical significance, they should be associated with the lowest incidence of SGIs - no conflict.

Hypothesis III. The superego is unique to males because of the threat of castration by the oedipal rival in response to male incestuous wishes.

Because females still retain a sexual cathexis with their paternal identifications, they should continue to have greater sexual content in their stories and less castration content in their responses to the Blacky castration card.

Although this hypothesis is theoretically cohesive with Freud's topographic theory, the auxiliary hypothesis of projection onto structured Blacky cards cannot be derived from Freud's topographic theory, only unstructured stimuli, like figure drawing and Rorschach inkblots can be derived (Reyher, 1992). Its constructs (threat of castration by the

Oedipal rival) cannot be justified independent of the corroborating dependent variable. As Meehl (1979) and Lakatos (1979) aver, the core commitments of the theory under test must be transmitted through auxiliary hypotheses to the conditions and dependent variables. The hypothesis is "warranted" by projective lore.

Justification for the Blacky card is wanting: That wishes and complexes indirectly or analogically depicted on a stimulus card are activated in subjects who view it, and furthermore, that they respond as directed to it rests solely on implicit assumptions in projective testing lore, not on their derivation from Freud's topographic theory.

The same non-derivability is true for stimulus narratives. Justification suffers as employment of these is based on clinical lore (Moses and Reyher, 1985). It can only be assumed that the stimulus materials actually activated a repressed Oedipus complex. In accordance with the provisions of this hypothesis, the activation of intrapsychic sources (id) of sexual wishes renders males (M) more susceptible than females (F) to intrapsychic conflict. Two of the aforecited investigations provide evidence that males are indeed more reactive to drawing the human body then females. Handler and Reyher (1964) found that male drawings of the male body were spatially displaced. Hamernick (1985) reported that males registered more anxiety than females on two electrodermal measures, but seven

graphic indices were uninformative. Because the Oedipus complex for females has not been destroyed or securely repressed - sexual mentation (incestuous wishes) should be more evident in stories elicited by appropriate thematically structured stimuli. They should continue to have sexual interest in their oedipal (incestuous) object. Moreover, they do not sublimate as readily as males do, and their identifications still retain a sexual cathexis (Freud, 1933/1986, p. 527), P: F > M.

On Freud's (1905) earlier views, which he reaffirmed later (Freud, 1905) unnamed instinct-restraining factors at puberty initiate a "fresh wave of *repression*" of libido (clitoral excitability), whereas there is "an accession of libido in boys" (p. 220). The restraining factors of interest is EI, hence P: F < M. The male dread of castration has nothing to do with the creation of EI.

Hypothesis IV. When incestuous wishes are activated, interpersonal concerns become prominent for females and intrapsychic concerns become prominent for males.

This hypothesis is transparently derivable from Freud's structural theory on gender differences with respect to SE. The same is not true for EI. There are no gender differences. Gender differences exist only if SE is true for males. This means that females are characterizable by EI. Negative findings indicate that both genders are characterizable by EI.

Therefore, following the stimulation of incestuous wishes by the request to complete an appropriate stimulus narrative and tell a story to appropriate thematically structured stimuli, females by virtue of EI regulation of instincts, are expected to display more other-directed mentation then males, whereas males, by virtue of SE regulation of instincts, are expected to display more self-directed (autonomous) mentation then females.

METHOD

Subjects

Subjects included 120 male and female members of Michigan State University. All were undergraduates attending the university and currently enrolled in an introductory psychology course. They typically included freshman and sophomores with few older cohorts present.

Subjects participated as a means of earning extra credit in their courses. Assignment to conditions was random as the subjects were kept blind to the variables at the time they agreed to participate and throughout the experiment.

Experimenters

Five experimenters were trained by the principal investigator to operate the Grass 5 polygraph and perform the functions of the protocol. The experimenters were advanced undergraduates, two males and three females. They were selected on the basis of their interest in figure drawings and psychological research in general. Each intended to obtain advanced degrees in psychology or related fields.

Each of the experimenters were trained in the administrations of the individual protocol only. Group experimenters were considered to have, by design, sufficiently limited contact with subjects that blindness to

the hypotheses was not considered a requirement.

Experimental Roles

Experimenters were required to operate in formal and informal conditions with subjects. These conditions were designed to encourage different perceptions by subjects of authority and professionalism in the experimenters. The formal condition was designed to encourage the projection of EI because of the authority implicit in formalized speech, behavior, and attire which piques self-monitoring. In contrast, to decrease the projection of EI, the informal condition de-emphasized authority, protocol, and self-monitoring. The formal condition was manipulated through dress (slacks, dress shirt/blouse and lab coat vs. jeans, sweatshirt or collarless shirt, and no lab coat) and body positioning (facing subject vs. facing Grass Polygraph). No other attempts were made to alter experimenters behavior. In general, experimenters had an equal number of Formal and Informal roles.

Rationale given to experimenters

The experimenters in the individual conditions were kept blind regarding the hypotheses of the study. In addition, they were unaware of a Group condition to the administration of the protocol. They independently surmised that the auditory stimulus was Oedipal in nature, but were led to assume that it and the figure drawings were a means of creating and measuring anxiety. Specific concepts were

never discussed. They were encouraged to observe subjects, master the protocol, and "have fun" documenting the responses subjects had to them as well as the variety of tasks involved.

Training

Experimenters were monitored on a weekly basis through audio tape recordings and the polygraph printout for conformity to the protocol. Weekly supervision occurred throughout by the principal investigator to correct errors in procedure and documentation. Following data collection, experimenters were completely debriefed and provided a broader view of the experimental design.

Materials and Equipment

A Grass (model 5) six channel polygraph, Beckman electrodes (Ag/AgCl; 177cm^2), and Grass PT5 Transducer with oncometer cuffs were used in the individual conditions to record electrodermal responses. The electrodes were filled with Beckman electrolyte and attached to the third phalanx of the second and third fingers of the non-preferred hand. A sized oncometer cuff was attached to the first phalanx of the first finger. Skin resistance from the electrodes and heart rate from the oncometer cuff and transducer were continuously recorded on paper by the polygraph. The polygraph and monitoring activity were used to induce strong objective self-awareness (Wicklund, 1975) and/or Social Anxiety (Schlenker and Leary, 1982).

Two tape recorders were utilized, one which presented the auditory stimulus and in full view of the subject, and the other which recorded the entire research procedure and was out of sight of the subject. The relevant segments of the experiment were transcribed as oral responses were believed to portray more accurately what the subject experienced (Hamernick, 1985).

Instruments

Scoring Procedures for Graphic Indices of Anxiety. Handler (1967) identified twenty graphic indices of anxiety for rating human figure drawings. Ten of these variables were used in this study: shading, erasures, reinforcement, omissions, line discontinuity, vertical imbalance, emphasis lines, detail, light-heavy line, and transparencies. These were selected because of their having been identified in previous studies as significant (Hamernick, 1985, 1987; Handler, 1967). (Appendix A)

Roach (1981) created rating scales for an automobile on twelve graphic indicators of anxiety. These scales were constructed parallel to Handler's (1967) scoring procedures for human figures. For the present study, the same ten indicators were selected from Handler's manual.

Hamernick (1985) modified Handler's scoring manual and Roach's scoring manual. The scoring scales were expanded in previous from a range of zero to three to include a range of zero to five on: shading, erasure, reinforcement, omission,

and transparency. The scoring ranges for the remaining five variables were similarly expanded for this research.

Each of the graphic indicators of anxiety were scored as described in the scoring manual. (Appendix A)

Castration Blatancy Scale. Stimulus narrative story completion and Blacky stories were all scored in a scale that rates the blatancy with which castration is depicted. Statistical agreement on the order of the derivatives of castration by advanced clinical psychology graduate students resulted in the scale as it exists. (Appendix B)

The Personal Power Function Profile (PPFP). This instrument was developed by Joseph Reyher and copyrighted in 1979. It identifies the presence and degree of 16 separate personal power functions related to physical characteristics (attractiveness, height, stature, and carriage), interpersonal skills (social savior faire, eye contact, speech, knowledge ability and talent germane to the interaction), personal-social attributes (socio-economic status, personal or family fame, authority or occupation, education, attire), and personal characteristics (voice, and expression of ideas). Individuals can be rated on each item from 1-5 suggesting low-to-high power. The higher a person rated, the more personally powerful they are considered to be viewed. Ten of the variables were used because of their direct applicability to the study and the laboratory situation. They were: attractiveness, height, stature,

savior faire, socio-economic status, attire, speech, eye contact, voice, and carriage (See Appendix C).

The Security Measures Inventory. This inventory was published in 1979 by Joseph Reyher. Thirty-eight separate interpersonal security operations are identified and described. (Appendix D)

Self-oriented and Other-oriented Scale. The story ending provided to the stimulus tape and to the Blacky card were scored for comments which referred to the subject in an intrapsychic conflict (SE) or to the subject in relationship with someone else (EI). (Appendix E)

Stimulus Narrative. The stimulus story was first used in an experiment as a sexual paramnesia (Sommerschield, 1969). With mild modifications it was audio taped for the present study. The story described the establishment and development of a relationship between the subject and an attractive mature member of the opposite sex. The younger person in the story was clearly identified as the subject listening to the tape. They helped the older person who has lost their change or a change purse. They develop a mutual liking, then friendship, and finally a telephone call interrupts what was progressively approaching a romantic climax. The story ends incomplete. Gender specific recordings differ only in the pronouns used to indicate the gender of the other person. Gender specific words (cologne and perfume) were interchanged to enhance the detail of the

stories. The stories were each approximately seven minutes in length, and of a male voice. Subjects are asked to provide their own completion orally. (Appendix F)

The Adventures of Blacky Inquiry Questions. Card VI of The Adventures of Blacky projective test was used in the experiment immediately following the oedipal story. The card is one of a series of ten cards which depicts in cartoon form "either a stage of psychosexual development or a type of object relationship within that development" (Blum, 1949). Card VI is described as depicting Castration Anxiety for males and Penis Envy for females. The castration stimulus measured the intensity of EI and SE reaction to the repressed wished activated in the incest-like seduction of the story. The card was presented as published. The standard inquiry questions provided with the cards are divided into male or female appropriate questions. Each of the original gender specific inquiry forms had one question unique to that sex subject. The two lists were combined to provide a uniform administration to all subjects. Eight questions make up the final combined form and differ only in the use of pronouns (i.e., he and she). The original multiple choice format remained, but the choices were modified or expanded drawing upon Blum's answers so that of the four possible responses to each question, two would reflect an intrapsychic (SE) concern and two would reflect an interpersonal (EI) concern. (Appendix

G)

Figure Drawing and Imagery Feedback Sheet. Subjects received this description of the experiment after they had completed the Experience in Today's Session questionnaire. (Appendix H)

Experience in Today's Session. Subjects completed this questionnaire at the end of the experimental procedures. This form asks subjects to rate their experimenter's behavior and attitude, as well as subjects' own motivation to participate in the experiment. (Appendix I)

Graphic Sexual Blatancy Scale (GSBS). The blatancy of the depiction of sexual anatomy was quantified using the Graphic Sexual Blatancy Scale as presented by Reyher (1984) (GSBS). (See Appendix J)

Group Administrations

Subjects were tested in classroom/seminar rooms. The room was well lit, seating up to 20 people comfortably, in a round table format. The experimenter was dressed casually and wearing a set of headphones as was the fad on campus. He spoke as little to the group as possible: introducing the experiment by title and handing out paper, instruction packets, and sufficient pencils to complete the experiment as each subject entered the room.

The cover page explained:

> "The instructions for this experiment are self-explanatory and self-paced. Please follow the directions as written without looking ahead. At some point, you will be asked to listen to a story. The experimenter will wait until everyone is ready before the tape is played. If you have any questions, the experimenter in the room will be able to help. Begin when your ready."

The experimenter remained present at all times, headphones on, music playing and a novel in hand. The group administration provided increased anonymity to subjects over individual testing with the least expected impact of the manipulations. The manipulation of formality was not done as the group administration was considered comparative.

Subject Selection and Initial Instructions

All subjects signed up for the experiment in their introductory psychology classrooms without foreknowledge as to the experiment's purpose nor the different conditions. Assignment was therefore considered to be random. Sheets indicating available times were posted a week in advance with the title "Figure Drawing and Imagery." Subjects were provided instructions at the sign-up sheet which read:

> "Thank-you for volunteering for this experiment. In order to make the most efficient use of your time, it would be helpful if prior to arriving for the experiment, you would complete the following tasks. Use a separate sheet of unlined (typing) paper per drawing, and using a pencil, please draw in order: a square, a triangle, an automobile, a male, and a female. Please arrange the figures in the order in which they were drawn. Your experimenter will meet you at your scheduled time at the east (Bogue street) entrance of the Psychology Research Building (Psy). Please bring your drawings with you. Your promptness will be much appreciated. Thank-you for

participating."

Half of the instructions reversed the order of the human figures.

Individual Experimental Procedure

Subjects were met by the experimenter in the east lobby of the Psychology Research Building in which the lab is located. The lobby was four by five feet with little pedestrian traffic. The experimenter knew the name of the subject in advance and introduced themselves. The experimenter began: "John Smith? Hello, I'm (their name). Please follow me." Subjects were escorted through a locked control door to the lab. They were asked for their at-home drawings as they entered an eight by eight foot room. Should they have forgotten their drawings, completed them in pen, or placed more than one drawing per page, the experimenter stated, "Let's get started. Please sit at this desk and again draw a square, triangle, automobile, male (female), and female (male). I'll return in a few minutes. Please draw one object per page." The experimenter was encouraged to behave as if completing the drawings again was a natural part of the experiment to decrease the likelihood of subjects' noncompliance confounding the data with their negative self-perceptions. The experimenter left the room for five minutes to provide privacy.

Subjects were then ushered into an adjoining room, also eight foot square containing the polygraph machine with a

chair, a small table with a chair, and a recliner. A supply of pencils, paper, and electrode equipment were on the table along with a microphone and a tape player. The subject sat at the small table, ninety degrees to the polygraph. The experimenter sat in the chair in front of the polygraph. The cassette recorder used to tape the sessions was located on a shelf in the polygraph, within easy reach of the experimenter and out of view of the subject. The tape was turned on as the subject entered the room and shut off at the end of the experiment.

Galvanic Skin Electrodes and a oncometer cuff were attached to monitor anxiety and heart rate respectively. The polygraph was calibrated while the experimenter talked with the subject as necessary about the equipment and answered their questions.

The subjects were habituated to the equipment with the use of requests to draw elementary geometric figures. Experimenters directed them, "I'd like you to draw some things for me. Use one page per drawing and one pencil per page. As you finish each drawing, set it aside one atop of the other." They continued, "I'd like you to draw a square and let me know when you have finished." This procedure was duplicated for a triangle. Then they were asked, "I'd like you to draw another triangle, this time shade it in and let me know when you have finished." This was followed by, "Begin shading on a blank page until I ask you to stop."

After thirty seconds they were asked to stop. Then, "Now on the page you have just shaded, begin to erase until I ask you to stop." After thirty seconds, they were asked to stop. The experimenter adjusted the polygraph throughout and paused between directions to realign the equipment.

As a means of introducing the oedipal stimulus tape, the experimenters stated,"You are going to hear a story which will be incomplete, I want you to listen to it and provide your own ending. Some people find it easier to concentrate on the story when they listen with their eyes closed." At the end subjects were asked, "How would you finish the story?"

The Blacky picture was introduced immediately following the auditory stimulus in a modified version of the standard beginning:

> "I'm going to show you a cartoon and the idea is for you to make up a story to go with it. Just tell me what is happening in the picture, why it is happening and so on. Since this is a test of how good your imagination can be, try to tell as much as possible about how the characters feel. You can have as long as you like for the story. At the end, I will ask you some questions to be sure I got everything you had it mind. There are no right and wrong answers to this cartoon. I'm just interested in what you imagine them to be."

The frontispiece was shown with the introduction of the four characters in The Adventures of Blacky projective with the addition of, "Our cartoon will only involve Blacky and Tippy." The card was shown with the standard introduction, "Here Blacky is watching Tippy..." After they have

indicated the end of their story, they are asked, "Anything you would like to add to the story?" The inquiry questions to the story were read to the subject off of a page which was introduced with, "Let me make sure I have everything you had in mind." (Appendix G)

The figure drawings were introduced with, "Now I'd like you to do some more drawings for me. I'd like you to draw an automobile. Please let me know when you have finished." Once completed, subjects were asked, "Would like to make any changes?" The automobile was always requested first, followed by the human figures. Subjects completed the drawings in the same order requested for their at-home drawings. The first human figure was requested with, "I'd like you to draw a male/female. Let me know when you have finished." Again, the subjects were provided the opportunity to make any changes. Then, "I'd like you to draw a female/male. Let me know when you have finished." Changes were again requested.

Subjects were asked three questions requiring them to assess their drawings and their drawing ability. These questions were expected to create anxiety about their drawing experience. Subjects evaluated their own drawing experience, when asked, "Do you draw much?" Their perception of the day's drawing performance was solicited with, "How well do you think you drew today?" They were asked to provide their perception of how well they believed

their drawing ability compared with others with, "How do you think your drawings seem to generally compare with the way others draw?"

The subjects were presented with the same requests to draw geometric figures as at the beginning of the experiment in order to "warm down."

Subjects were asked to complete the PPFP about the experimenter and their impressions of the experimenter's behavior. This manipulation check monitored how powerful they were projecting their experimenter as being. Experimenters disconnected subjects from the apparatus, handed them the rating form and left the room to stamp their experiment participation card. Subjects were provided an envelope and encouraged to seal their form inside to assure confidentiality. At this time they received a brief summary of the experiment and any questions that they might have had were answered.

Order of Experiment

The presentation of the auditory stimulus tape and the figure drawing sections were counterbalanced to evenly distribute possible order effects. Half of the subjects received the auditory stimulus first, while the remaining half were asked to begin with figure drawings.

The figure drawings were counterbalanced to manage the bias of order effects (Ellch, 1969). Subjects completed the figures in the same order requested of their at-home

drawings. Automobiles were presented first, then the human figures were drawn.

RESULTS AND DISCUSSION

This section will first present the scoring interrater reliabilities for the dependent measures, describe the manipulation checks, examine the reliability of the dependent measures, and finally, examine the experimental hypotheses as presented in the Introduction.

Interrater reliability. The interrater reliabilities provided a measure of how well the scoring criteria were adhered to for the dependent measures. Presented below are the reliabilities for the graphic variables for the human figures and the automobile, verbal data obtained from spontaneous comments, story completions, and responses from subjects about their drawing skill.

Graphic Data. Each human figure drawing was rated on ten graphic behaviors, four egoistic graphic behaviors (EGBs) and six standard graphic indices (SGIs), as presented by Handler (1964) and modified by Roach (1981) and Hamernick (1985; 1987). The correlations (Pearson) between raters ranged from 0.78 to 0.99. Ratings on Automobile drawings were done with the same ten graphic behaviors and scored as presented by Roach (1981) and modified by Hamernick (1985; 1987). Automobile drawing interrater correlations ranged from 0.88 to 0.99 (Table 1).

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Insert Table 1 about here

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Table 1

Interrater Reliability for Human and Auto Drawings

Drawing Variables	Human Figure[a]	Auto Figure[b]
Egoistic Graphic Behaviors		
Reinforcement[c]	0.78	0.88
Shading	0.94	0.93
Erasure	0.98	0.94
Emphasis Lines	0.87	0.91
Standard Graphic Indices of Anxiety		
Transparencies	0.95	0.96
Vertical Imbalance	0.98	0.99
Light Heavy Line	0.86	0.88
Omissions	0.96	0.90
Line Discontinuity	0.92	0.94
Details	0.99	0.93
Blatancy of Graphic Sexual Depiction	0.94	

[a] (N=480) human drawings

[b] (N=240) automobile drawings

[c] Interrater correlations from Pearson "r" statistic

Verbal Data. Verbal data collected throughout the experimental procedure were transcribed from the audiotape, then scored on a variety of different measures. Story completions to an auditory stimulus tape were rated for the number of egoistic verbal behaviors (EVBs) used and the blatancy/remoteness of derivatives of castration within each story. Stories to The Adventures of Blacky (Blum, 1949) castration card (Card VI) were also scored for EVBs and Castration Blatancy. In addition, EVBs were tallied for the number of spontaneous comments while drawing the automobile and during the subject's responses to three questions about their drawing skill. Self- and other-directed statements in the stories were tallied and summed. The obtained reliabilities for all of the verbal data ranged from 0.93 to 0.99 (see Table 2).

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Insert Table 2 about here

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Manipulation checks. A variety of manipulation checks were conducted to determine if the manipulation of ego-threat was successful and that the experimental design (within versus between subjects) and the dependent measures (graphic behaviors) were sufficiently sensitive to ensure a fair test of the experimental hypotheses.

Ego-threat. The ten graphic behaviors (the egoistic graphic behaviors [EGBs] were reflected) were summed for

Table 2

Interrater Reliability for Verbal Stories and Comments

Variables for Stories/Comments	Correlation[a]
Egoistic Verbal Behaviors (EVBs) in Story Completion	0.95
Submissive-placating Verbal Behaviors (SVBs) in Stories	0.99
Spontaneous EVBs during auto drawing	0.97
Spontaneous SVBs during auto drawing	0.97
EVBs during three drawing questions	0.95
SVBs during three drawing questions	0.93
Story Castration Blatancy rating	0.94
Blacky Castration Blatancy rating	0.99
"Self-oriented" comments during story	0.98
"Other-oriented" comments during story	0.97

[a] Interrater reliability from Pearson "r" statistic

each drawing, and each wassubjected to at-home and laboratory contrasts (within subjects). Table 3 shows that each drawing significantly differentiated between the two conditions, showing the expected asymmetry for the total sample as well as by gender. The auto was lowest for both genders at-home but became equivalent in the laboratory (Table 3). This ordinal interaction is opposite to that of Handler and Reyher's (1964) report that the human bodies diverge from the auto under high ego-threat. Nevertheless, the interpretation of greater intrapsychic conflict for human bodies is intact.

On Freud's topographic theory, the greater graphic anxiety at-home for human bodies than the auto reflects the operation of an autonomous SE for *both* genders, and the increase for both genders in the laboratory is construed to mean that they are equally influenced by extrapsychic sources of anxiety as required by EI.

- -

Insert Table 3 about here

- -

A different picture is presented by the standard graphic indices (SGIs) (Table 4). For both genders the auto is significantly less and changes little, whereas both human bodies increase. This is exactly the interaction that Handler and Reyher (1964) found. Obviously, EGBs, even though reflected, contaminate the summed (overall) index of

Table 3

Sum of Ten Graphic Behaviors in Relation to At-Home (unobserved) and Laboratory (observed) Conditions and Type of Stimulus Object (Male, Female, Auto). EGBs are reflected.

Entries in body of table are medians

Stimulus Object	Condition: At-home	Laboratory	T	p value[a]
All Subjects[b]				
Male Drawing	22.70	24.70	-4.53	.0001
Female Drawing	23.10	23.79	-4.38	.0001
Auto Drawing	21.25	23.56	-4.73	.0001
Male Subjects[c]				
Male Drawing	23.00	25.13	-2.97	.003
Female Drawing	22.63	23.79	-3.21	.001
Auto Drawing	21.50	23.92	-3.08	.002
Female Subjects[c]				
Male Drawing	22.50	23.10	-3.42	.001
Female Drawing	22.50	23.79	-2.90	.004
Auto Drawing	21.00	23.92	-3.62	.0001

[a] Wilcoxon matched-pairs signed ranks

[b] T(N = 120), [c] T(n = 60)

Note: Laboratory combines Formal, Informal, and Group conditions.

anxiety because of its categorical difference. Thus, without even conducting the tests of the experimental hypotheses, there is evidence that the instinct-restraining entity for both genders is EI. With respect to SGIs, all differences were in the right direction and significant, except for the female drawing of the auto which did not approach significance. Because of the possibility of interactions involving gender, only gender breakdowns hereon were examined for the EGBs and SGIs.

- -

Insert Table 4 about here

- -

The unreflected EGBs tell their own story (Table 5). At-home males show fewer EGBs on the two human bodies than they do on the auto, but both diverge in the laboratory: EGBs on the human bodies decrease, whereas EGBs on the auto increase. On Freud's topographic theory, this is an operational definition of displacement.

All drawings but one were significant in the expected direction (Table 5). Anomalously, the auto was significant in the wrong direction (greater EGBs at home), and all three stimulus objects for females were in the right direction (fewer EGBs in the laboratory), but the female body did not approach significance. Thus, the results were more uniform for SGIs than EGBs.

Table 4

Standard Graphic Indices of Anxiety (SGI) in relation to At-Home (unobserved) and Laboratory (observed) Conditions and Type of Stimulus Object (Male, Female, Auto)

Entries in body of table are medians

Stimulus Object	Condition: At-home	Laboratory	T	p value[a]
All Subjects[b]				
Male Drawing	6.31	7.04	-2.92	.003
Female Drawing	6.20	7.36	-4.55	.0001
Auto Drawing	5.09	5.30	-1.90	.05
Male Subjects[c]				
Male Drawing	6.33	7.28	-2.33	.02
Female Drawing	6.28	7.50	-3.35	.001
Auto Drawing	5.12	5.50	-2.12	.034
Female Subjects[c]				
Male Drawing	6.28	6.92	-1.81	.07
Female Drawing	6.14	7.25	-3.12	.002
Auto Drawing	5.06	5.14	-0.58	.56

[a] Wilcoxon matched-pairs signed ranks

[b] T(N = 120), [c] T(n = 60)

Note: Laboratory combines Formal, Informal and Group conditions.

- -

Insert Table 5 about here

- -

The findings for standard graphic indices (SGIs) and egoistic graphic behaviors (EGBs) attest to the success of the at-home versus laboratory manipulation. However, this was not the case for the style (formal and informal) versus the group contrasts. Table 6 shows that all three differences in EGBs for the stimulus objects by males were in the right direction, but none were significant. None were significant for females and only one was in the right direction, the auto. Once again in contrast, SGIs were more uniform (Table 7). All were in the right direction for both genders, and the female body drawn by males closely approached significance.

- -

Insert Table 6 about here

- -

- -

Insert Table 7 about here

- -

Thus, only at-home versus laboratory contrasts allow a fair test of the experimental hypotheses, and in regards to the two indices of graphic behavior, only SGI is unproblematic - not complicated by interactions.

The same success was not obtained for a between subject

Table 5

Egoistic Graphic Behaviors (EGBs) in Relation to At-Home (unobserved) and Laboratory (observed) Conditions and Type of Stimulus Object (Male, Female, Auto).

Entries in body of table are medians

Condition Stimulus Object	At-home	Laboratory	T	p value[a]
Male Subjects[b]				
Male Drawing	2.50	1.62	-1.80	.07
Female Drawing	2.95	2.50	-1.55	.12
Auto Drawing	3.59	3.75	-2.03	.04
Female Subjects[b]				
Male Drawing	3.90	2.23	-3.03	.002
Female Drawing	4.00	3.12	-1.29	.20
Auto Drawing	3.37	1.11	-4.41	.0001

[a] Wilcoxon matched-pairs signed ranks

[b] T(n = 60)

Note: Laboratory combines Formal, Informal, and Group conditions.

Table 6

Egoistic Graphic Behaviors (EGBs) in Relation to Group (unobserved) and Style (formal and informal) Conditions and Type of Stimulus Object (Male, Female, Auto).

Entries in body of table are medians

	Condition			
Stimulus Object	Group[a]	Style[b]	U	p value[c]
Male Subjects				
Male Drawing	2.00	1.64	375.5	.70
Female Drawing	4.00	2.21	434.0	.59
Auto Drawing	3.00	2.67	419.5	.10
Female Subjects				
Male Drawing	1.36	2.84	300.5	.11
Female Drawing	2.84	3.30	368.5	.62
Auto Drawing	1.30	1.00	441.0	.51

[a] U(n = 40), [b] U(n = 80), [c] Mann-Whitney U Test

Note: Style combines Formal and Informal conditions

Table 7

Standard Graphic Indices of Anxiety (SGIs) in Relation to Group (unobserved) and Style (formal and informal) Conditions and Type of Stimulus Object (Male, Female, Auto)

Entries in body of table are medians

Stimulus Object	Condition: Group[a]	Style[b]	U	p value[c]
Male Subjects				
Male Drawing	7.16	7.33	412.5	.84
Female Drawing	6.83	7.90	517.5	.06
Auto Drawing	4.25	5.70	415.5	.81
Female Subjects				
Male Drawing	5.94	6.90	423.0	.71
Female Drawing	6.50	7.41	498.0	.12
Auto Drawing	4.33	5.30	495.5	.13

[a] U(n = 40), [b] U(n = 80), [c] Mann-Whitney U Test,

Note: Style combines Formal and Informal conditions.

comparison involving the style and group conditions (Tables 6 & 7). This finding implies that the manipulation of ego-threat produces weak effects on graphic behaviors that are only detected by a within subjects design.

To further ensure a fair test of the experimental hypotheses, the manipulation of ego-threat was examined forboth within and between subject comparisons. Recall that asymmetries in the distribution of graphic behaviors across levels of ego-threat were obtained in prior investigations (Jacobson & Handler, 1967; Handler & Reyher, 1964). Like the present investigation, they compared observed polygraph (close monitoring) with the unobserved, group condition; however, they counterbalanced the two conditions, whereas in the present investigation the unobserved (at-home) condition always came before the observed (laboratory polygraph-monitoring). However, the at-home first order does not pose problems of uncontrolled order effects because habituation to the task actually diminishes the influence of ego-threat: the observed condition becomes less threatening on the second administration of the task. This outcome is especially true for females (Jacobson & Handler, 1967), but this was not corroborated by the present investigation. By inspection of the tables, the genders appear to be equivalent in the asymmetries (habituation) produced by the manipulation.

Even more robust findings might be obtained by a more

closely scrutinized controlled at-home condition to minimize the operation of unknown and uncontrolled sources of ego-threat, namely, the presence of suitemates attentive to the subject's task, perhaps even commenting on their graphic ineptitude. Even if we assume that all subjects did the task in solitude, they knew at the time that inspection and evaluation of their drawings by the experimenter would come later (delayed observation). They had agreed to bring them in for their first appointment with the unknown experimenter. Thus, the possibility of obtaining a significant difference between at-home and laboratory conditions on a pertinent dependent measure is reduced to the extent that habituation and impromptu monitoring takes its toll of variance.

The failure to find a difference between the group and laboratory conditions cannot be attributed solely to the relative loss of power in between subjects design. The sample size (n = 60) is certainly large enough to detect a robust phenomenon with the Mann-Whitney U test, which approximates the power of the t-test (Siegal, 1956). Therefore, a closer examination of the group condition is in order. Low ego-threat may have been considerable: subjects performed their tasks amongst strangers located in the Psychology Department, not their private quarters. Perhaps, the presence of others, including the experimenter is intrinsically threatening. This does not mean that ego-

threat is absent or minimal. Even though the act of drawing was not observed, they knew that inspection and evaluation would come later. Nevertheless, this does not approach the intimidation of close monitoring. Perhaps there is a ceiling effect on the graphic behaviors.

Experimenter Style. The two items (Attire and Eye Contact) that constituted the manipulation of "style" succeeded in directionally differentiating the formal and informal component conditions of style as expected, $U(n = 80) = 967.5$, $p < .05$. The corresponding medians are 7.19 and 6.72, respectively. Nevertheless, the full PPFP scale failed to differentiate them, $U(n = 80) = 875.5$, $p < .23$. The PPFP medians for the formal and informal conditions are 35.25 and 34.75, respectively. Unexpectedly, the effects of attire and eye contact did not generalize to the other items. Accordingly, this manipulation was deemed unsuccessful.

Personal Power (PPFP). The effect of the manipulation of ego-threat/proximity also was tested for the two experimenter style conditions and group condition on PPFP wherein there is different spatial (proximity) and monitoring arrangements between subject and experimenter. Obviously these relationships are more proximal compared to the at-home vs. laboratory comparison. The dimension of "distance" is truncated. An inspection of the medians reveals a significant outcome which can be attributed solely

to the group condition (Table 8), using a less powerful between-subjects analysis. The formal-informal manipulation consistently but inconsequentially favored the formal over the informal condition. Males and females contributed equally to this significant outcome.

The progressive decrease in PPFP medians reveals an important functional relationship between PPFP and ego-threat. Esteem for the experimenter is directly related to intimidation. On Freud's topographic theory, this is transference.

The combined PPFP scores associated with Attire and Eye Contact better differentiated the two style conditions than the whole scale (Table 9), albeit the group condition still contributed the most to the overall significance. Thus enhanced intimidation did not generalize to the other scale items. Again, males and females contribute equally to this outcome.

Insert Table 8 about here

Insert Table 9 about here

Subjects's impression of experimenter. Upon the completion of the experimental procedures, subjects rated the experimenter on (a) consideration, (b) respectfulness,

Table 8

Personal Power Functions Profile (PPFP) Total Score Medians Across Groups and Conditions

Entries in body of table are medians

	Conditions				
	Formal	Informal	Group	H	p value[a]
Group					
Male[b]	35.25	34.25	31.25	14.85	.001
Female[b]	35.25	35.16	31.16	16.39	.0001

[a] Kruskal-Wallis one-way analysis of variance by ranks

[b] H(2, n = 60)

Note: Maximum PPFP score is 50, ten items with a high score of 5 per item.

Table 9

Medians of Sum of Attire and Eye Contact Across Groups and Conditions

	Conditions				
	Formal	Informal	Group	H	p value[a]
Group					
Male[b]	7.13	6.70	5.30	14.10	.0005
Female[b]	7.25	6.75	4.83	20.93	.0001

[a] Kruskal-Wallis one-way analysis of variance by ranks

[b] H(2, n = 60)

Note: Maximum score for these two items is 10, a maximum score of 5 is available for each item.

(c) friendliness, and (d) likableness. Subjects' ratings were summed across the four five-point Likert-type scales which ranged from "Very little" to "Very much".

Insert Table 10 about here

The findings for the truncated manipulation of ego-threat/proximity adhere to the same pattern as PPFP (Table 10). The difference between formal and informal conditions was trivial and each of them were substantially greater thanthe group condition. In the style conditions the subjects tended to be upbeat. They rated the experimenters "very much" (Md: 19.7/4 = 4.93) on friendly, respectful, considerate, and likeable. It is the disparate group condition that accounts for the significant outcome. In contrast they gravitated toward the indifferent middle of the scale (Md: 12.3/4 = 3.10). Although a gender effect did emerge, females tended to rate the experimenter higher. The difference between the two style conditions and the group conditions relationship between PPFP and ego-threat suggests a functional relationship between PPFP and ego-threat; namely transference.

Motivation to participate. The same Likert-type scale was used, ranging from "Highly motivated", "Moderately motivated", "Indifferent", "Slightly motivated", and "Not at all motivated". The results for the truncated manipulation

Table 10

Subjects' Impression of their Experimenter in Relation to Formal, Informal and Group Conditions.

Entries in body of table are medians

	Conditions				
	Formal	Informal	Group	H	p value[a]
Male Subjects[b]	4.90	4.95	3.0	35.92	.0001
Female Subjects[b]	4.93	4.95	3.3	16.10	.0001

[a] Kruskal-Wallis one way analysis of variance

[b] H(2, n = 60)

Note: Maximum score for each of the four items was 5. The score represents the median score from 1-5.

of ego-threat/proximity adhere to the same pattern as PPFP (Table 11). Once again, the same pattern emerged: the two experimenter style conditions were equivalent but substantially different from the group condition. Subjects in the group condition indicated their motivation was at worst "Indifferent", and the subjects in the style conditions rated themselves as more motivated, "Somewhat Motivated". The progressive decrease in PPFP medians reveals a functional relationship between PPFP and ego-threat (transference).

Insert Table 11 about here

Security measure inventory (SMI) - egoistic verbal behaviors (EVB) versus submissive-placating interpersonal verbal behaviors (SVB). Only the informal and formal conditions enabled contrasts. Proximity is no longer involved. Egoistic verbal behaviors, otherwise called mastery-dominant (take-charge) interpersonal behaviors (EVB), should decrease with an increase in ego-threat while SVBs should increase (Reyher, 1991). Security measures (SMs) were collected for the auto drawing (A), the completion of the stimulus narrative (ST), the story (and inquiry) elicited by the Blacky castration card (BC), and the three questions as to their drawing performance (3Qs). Security measures as presented by Reyher (1979, 1992) were

Table 11

Subjects' Motivation to Participate in relation to Formal, Informal and Group Conditions.

Entries in body of table are medians

	Conditions				
	Formal	Informal	Group	H	p value[a]
Male Subjects[b]	4.0	3.7	2.7	14.66	.001
Female Subjects[b]	3.9	2.1	3.2	5.08	.04

[a] Kruskal-Wallis one way analysis of variance

[b] H(2, n = 60)

Note: Scores were inverted to positively correlate with motivation.

identified in the verbal data collected. A sum total of the number of SMs for each variable were scored.

When conditions were collapsed, spontaneous SMs on the auto were made more frequently by female subjects than by male subjects (M-W, $U = 705.0$, $p < .17$). A closer inspection revealed interaction by gender and condition: male subjects showed a non-significant decrease in SMs as ego-threat decreased (M-W $U = 222$, $p < .272$); while female subjects showed a statistically significant increase (M-W $U = 134.5$, $p < .036$). The interaction (Bradley, 1968) approachedsignificance (M-W $U(n = 40) = 268$, $p < .065$), but it appears that females made the greatest contribution to this outcome.

The verbal measures were consistent in their inability to differentiate the style conditions (Table 12).

Insert Table 12 about here

Graphic depiction of sexual anatomy. On Freud's integrated theory, blatancy of sexual depiction should decrease as a function of ego-threat. Indeed, Table 13 shows that depiction of the sexual anatomy is asymmetrical with respect to sex of drawing and level of ego-threat, but not gender of drawer. Only the female body decreased significantly in the at-home versus laboratory contrast. The male body was unaffected. Most likely this interaction

Table 12

Incidence of Security Measures while Drawing the Auto (AutoSMs), to three Questions about their Drawing Skill (3QsSMs), Story Completion (StSMs), Blacky Stories (BlkySMs) in Relation to Style Conditions.

Entries in body of table are medians

	Conditions			
	Formal	Informal	U	p value[a]
Male Subjects[b]				
AutoSMs	1.5	1.3	222.0	.27
3QsSMs	6.8	5.1	229.5	.32
StSMs	3.5	3.2	227.0	.33
BlkySMs	14.0	16.5	155.0	.11
Female Subjects[b]				
AutoSMs	1.3	3.0	134.5	.07
3QsSMs	5.0	4.5	222.5	.27
StSMs	3.5	4.8	187.0	.36
BlkySMs	12.0	13.0	185.5	.35

[a] Mann-Whitney U test

[b] U(n = 40)

is, at least, partially due to the greater salience or conspicuousness of the sexual anatomy on the female drawing. Nevertheless, the GSBS score is scant, even for males drawing the female body at-home.

On this measure (GSBS) the manipulation was successful.

Insert Table 13 about here

Overall evaluation. The replication of the interaction between incidence of standard graphic indices (SGIs) and level of ego-threat reported by Handler and Reyher (1964) testifies to the success of the at-home versus laboratory manipulation of ego-threat by proximity and ego-bypassing devices (polygraph monitoring) in a one-on-one relationship. Findings converging on transference is compelling; that is, there is a recurrent functional relationship between degree of ego-threat and subjects' approval of the experimenter: As experimenter power (PPFP) increases, subjects' impressions and motivation to participate increase. This was not the case for experimenter style (formal versus informal) which seemed to have been washed out by the galvanizing threat of the laboratory situation. Spatial proximity and close monitoring appear to be overriding factors in ego-threat. It is clear that the graphic behaviors are not as sensitive to the manipulation of ego-threat as subjects' evaluation of the experimenter; it was only sensitive to the truncated

Table 13

Blatancy of Graphic Sexual Depiction (GSBS) on Male Drawing and Female Drawing for Male and Female Subjects

Entries in body of table are medians

	Conditions			
MALE DRAWING	At-home	Laboratory	T	p value[a]
Male Subjects[b]	.31	.31	.57	.28
Female Subjects[b]	.35	.33	.35	.35
FEMALE DRAWING				
Male Subjects[b]	.46	.37	1.72	.05
Female Subjects[b]	.50	.39	1.62	.05

[a] Wilcoxon matched-pairs signed ranks

[b] T(n = 40)

Note: Laboratory combines Formal, Informal, and Group conditions.

manipulation. Overall, the manipulation checks indicate that a fair test of the experimental hypotheses is contingent upon proximity: the at-home versus laboratory and group versus style contrasts, the former being more powerful. Experimenter style (formal versus informal) does not pose a fair test.

Reliability of dependent measures

In the Freudian domain there is the omnipresent possibility of instinct-driven unconscious fantasies undergoing vicissitudes because of shifts in the interplay of repressive and antirepressive forces due to events in the testing situation or experimental manipulation (Acheson, 1979; Reyher, 1959; Sanders & Reyher, 1972). Accordingly, separate correlation matrices were generated for each combination of gender and level of ego-threat - low ego-threat (at-home) and high ego-threat (close monitoring).

Solid line triangles, in keeping with the conventions of Campbell and Fiske (1959), are correlations involving different stimulus objects using the same measure - hetero-object homo-measure. Not only is there a broad range of magnitudes, but some are negative, indicating that some unknown process changes across the stimulus objects. This is true for both the graphic behaviors and security measures. A comparison of the two levels of threat for females reveals that high ego-threat exacerbated correlational divergence.

In contrast to females, correlations in the male matrices were comparatively uniform, with one major exception (Table 14, cell ed = -.04). The magnitude of correlations on the female body were conspicuously small and positive under low ego-threat (Table 14). However, under high ego-threat they turned negative (Table 16). Touching the female body appears to have cued a qualitatively different reaction. Pending an attempt to identify what processes these vicissitudes denote, the unreliability of the measures obviously is unacceptable with respect to psychometric traditions.

Insert Table 14, 15, 16, 17 about here

The broken-line diagonals display marked vicissitudes for the same object using different measures - homo-object hetero-measure. An examination of the diagonals for both genders for SGI correlated with SMI reveals that the two alleged measures of anxiety are positively correlated for males (Table 16, cells if, jg, & kh are .29, .21, & .04 respectively) and negatively but not uniformly correlated for females (Table 17, cells if, jg, & kh are -.37, -.08, & -.27 respectively). Furthermore, the source of SMs is not the same for both genders - stories to the stimulus tape (ST) for males, and comments while drawing the auto (A) for females. Once again a qualitative difference distinguishes

Table 14

Correlation Matrix for Dependent Graphic and Verbal Measures for Male Subjects under Low Ego-Threat (at-home)

			Method							
			Libido					Anxiety		
Method			GSBS			EGB			SGI	
			M	F	A	M	F	A	M	F
			a	b	c	d	e	f	g	h
Libido										
GSBS	M	a								
	F	b	.29[a]							
EGB	A	c	.38[c]	.09						
	M	d	.50[c]	.31[a]	.42[c]					
	F	e	.04	.11	.12	-.04				
Anxiety										
SGI	A	f	-.45[c]	-.15	-.57[c]	-.50[c]	-.03			
	M	g	.29[c]	.23	.19	-.39[b]	-.10	.31[c]		
	F	h	.28[a]	.33[a]	.09	-.40[c]	.07	.45[c]	.63[c]	

[a]p < .05; [b]p < .01; [c]p < .001

Note: A, M, and F denote auto, male, and female drawings respectively. Small letters are row and column designations to aid in referring to a particular cell. GSBS=Graphic Sexual Blatancy Scale; EGB=Egoistic Graphic Variables; SGI=Standard Graphic Indicators.

Table 15

Correlation Matrix for the Dependent Graphic and Verbal Measures for Female Subjects under Low Ego-Threat (at-home)

			Method							
			Libido					Anxiety		
Method			GSBS			EGB			SGI	
			M	F	A	M	F	A	M	F
			a	b	c	d	e	f	g	h
Libido										
GSBS	M	a								
	F	b	.00							
EGB	A	c	.10	.23						
	M	d	.46[c]	.17	.17					
	F	e	.02	.27[a]	.31[a]	.04				
Anxiety										
SGI	A	f	-.04	-.18	.34[b]	-.11	-.20			
	M	g	.15	-.10	.04	-.29[a]	.04	-.11		
	F	h	.18	-.01	.12	-.18	.07	-.09	.35[b]	

[a]$p < .05$; [b]$p < .01$; [c]$p < .001$

Note: A, M, and F denote auto, male, and female drawings respectively. Small letters are row and column designations to aid in referring to a particular cell. GSBS=Graphic Sexual Blatancy Scale; EGB=Egoistic Graphic Variables; SGI=Standard Graphic Indicators.

Table 16

Correlation Matrix for Dependent Graphic and Verbal Measures for Male Subjects under High Ego-Threat (style)

			Method														
			Libido								Anxiety						
Method			GSBS			EGB			SGI		SMS			SVB			
			M	F	A	M	F	A	M	F	3Q	A	ST	3Q	A	ST	
Libido			a	b	c	d	e	f	g	h	i	j	k	l	m	n	
GSBS	M	a															
	F	b	31[a]														
EGB	A	c	28	41[a]													
	M	d	70[c]	31[a]	64[c]												
	F	e	24	-20	16	-13											
Anxiety																	
SGI	A	f	-22	-25	36[a]	-37[a]	10										
	M	g	21	-10	31[a]	-37[a]	20	38[a]									
	F	h	-37[a]	01	24	-39[a]	14	14	59[c]								
SMS	3Q	i	12	-19	-03	-04	13	29	16	18							
	A	j	08	03	35[a]	09	10	-13	21	-11	34[a]						
	ST	k	-13	-04	21	-01	-01	15	01	04	33[a]	25					
SVB	3Q	l	27	17	05	-04	01	05	15	-05	42[b]	42[b]	19				
	A	m	24	05	31[a]	14	01	-12	13	-10	36[a]	78[c]	23	39[a]			
	ST	n	-06	-16	02	-07	06	28	09	-01	19	09	73[c]	26	14		
Power																	
PPFP		o	11	-02	-09	12	-02	-17	-14	20	-05	-02	02	-19	11	-09	

[a]p < .05; [b]p < .01; [c]p < .001 ; (n = 40)

Note: A, M, and F denote auto, male, and female drawings. Small letters are row and column designations to refer to a particular cell. GSBS=Graphic Sexual Blatancy Scale; EGB=Egoistic Graphic Variables; SGI=Standard Graphic Indicators; SVB=Submissive Verbal Behaviors;SMS=Security Measures Scale; PPFP= Personal Power Functions Profile.

Table 17
Correlation Matrix for Dependent Graphic and Verbal Measures for Female Subjects under High Ego-Threat (style)

			Method													
			Libido							Anxiety						
Method			GSBS			EGB			SGI		SMS			SVB		
			M	F	A	M	F	A	M	F	3Q	A	ST	3Q	A	ST
Libido			a	b	c	d	e	f	g	h	i	j	k	l	m	n
GSBS	M	a														
	F	b	18													
EGB	A	c	01	07												
	M	d	17	07	05											
	F	e	01	27	20	-05										
Anxiety																
SGI	A	f	-06	17	-46[b]	-16	11									
	M	g	01	07	05	-21	-02	-23								
	F	h	08	14	-03	-22	09	01	57[c]							
SMS	3Q	i	11	-03	-23	-32[a]	33[a]	-31[a]	52[c]	06						
	A	j	-18	10	-17	03	-01	10	-08	-12	-09					
	ST	k	03	10	01	06	05	-29	-04	-27	34[a]	33[a]				
SVB	3Q	l	10	03	-06	14	-01	13	-15	01	-15	-18	-16			
	A	m	-29	-01	02	12	-07	-08	04	01	-04	66[c]	30[a]	13		
	ST	n	-04	22	-17	10	21	07	03	-02	22	12	63[c]	-20	09	
Power																
PPFP		o	11	32[a]	06	-07	-15	22	21	11	16	18	-04	01	23	-18

[a]p < .05; [b]p < .01; [c]p < .001 ; (n = 40)

Note: A, M, and F denote auto, male, and female drawings. Small letters are row and column designations to refer to a particular cell. GSBS=Graphic Sexual Blatancy Scale; EGB=Egoistic Graphic Variables; SGI=Standard Graphic Indicators; SVB=Submissive Verbal Behaviors;SMS=Security Measures Scale; PPFP= Personal Power Functions Profile.

the two genders. Finally, the negative correlation (Table 17, cell li = -.15) for the broken-line diagonals in the female SVB matrix indicates that the mix of EVBs and SVBs changed in reaction to the threat of three self-evaluating questions about subjects drawing skill (3Qs). The female body for both genders is disparate and therefore unacceptable as a direct measure of anxiety. Accordingly, security measures as well as egoistic graphic behaviors (EGBs) fail to provide a fair test of experimental hypotheses that involve claims about anxiety.

The only analyses that can be trusted even minimally are those of males that do not include EGBs on the female body. None of the correlations can be trusted that involve the female body. Means that involve standard graphic indices (SGI) are the most trustworthy. Therefore, those experimental hypotheses that require the compromised measures for use in statistical inference cannot be construed as having been tested fairly. Security measures have different gender-linked meanings and cannot be used for gender contrasts.

Experimental Hypotheses

Hypothesis I This hypothesis, which asserts that conscience produces narcissistic injuries in direct proportion to degree of ego-threat, as indexed by (a) proximity of an observer and (b) personal power, was weakly

corroborated in regard to proximity.

Proximity of observer. Narcissistic injuries are directly indexed by SGIs and indirectly indexed by EGBs. Using a within-subjects analyses (at-home versus Laboratory) on the auto, psychosexually the most neutral figure, the expected results due to proximity were obtained (Table 18). In contrast to the paucity of SGIs on the auto at-home, SGIs were copiously and significantly present in the laboratory, Wilcoxon for both males (Wilcoxon, -2.589, $p < .01$) and females (Wilcoxon, -2.687, $p < .0001$).

- -

Insert Table 18 about here

- -

A more difficult observation hurdle was set-up. Under three levels of progressively increasing ego-threat (Low: at-home; Moderate: Group; High: Laboratory, formal and informal), a with-in subjects analysis was made possible by using subjects only for their at-home or away-from-home drawings, a functional or multivalent experiment (Melton, 1962). Table 19 shows an orderly progression of EGB medians for both genders for low, moderate, and high levels of ego-threat which graphically presents the function between ego-threat and SGI. The two extreme conditions were significantly different for males (Wilcoxon, 2.152, $p < .03$) and for females (Wilcoxon, 3.684, $p < .0001$).

Table 18

Standard Graphic Indices of Anxiety (SGI) in relation to At-home, and Laboratory Conditions by Auto Drawing.

Entries in body of table are medians

	Conditions			
	At-home	Laboratory	Wilcoxon	p value[a]
Male Subjects[b]	5.12	5.50	-2.589	.01
Female Subjects[b]	5.06	5.14	-2.687	.007

[a] Wilcoxon matched-pairs signed ranks

[b] T(n = 60)

Note: Laboratory combines Formal, Informal, and Group conditions.

- -

Insert Table 19 about here

- -

Table 20 does not show the expected orderly progression for SGIs. Both genders show a dip undermoderate ego-threat. The Kruskal Wallis analysis of variance was significant for females, Kruskal-Wallis, $H(2, N = 240) = 6.327$, $p < .04$, while males approached significance, K-W, $H(2, N = 240) = 4.013$, $p < .06$. Similarly, the indirect measure (EGB) did show significant orderly progression for females, K-W, $H(2, N = 240) = 12.797$, $p < .002$, but did not for males, K-W, $H(2, N = 240) = 1.918$, $p < .16$. Anomalously for both males and females, according to SGIs, the group condition was less of an ego-threat then the at-home condition.

- -

Insert Table 20 about here

- -

Personal power (style: Informal versus Formal). The foregoing manipulation check on experimenter style showed that this manipulation was ineffective and deemed not to be a fair test relative to the success of the other manipulations. The manipulation check and test of the hypotheses are one and the same.

Conclusions and implications. As indexed by SGIs, the spatial dimension of proximity cannot be regarded as

Table 19

Egoistic Graphic Behaviors (EGBs) on the Auto Drawing in relation to Low (at-home), Moderate (group), and High Ego-threat (style) Conditions

Entries in body of table are medians

	Ego-threat				
	Low	Moderate	High	Wilcoxon	p value[a]
Male Subjects[b]	3.59	3.00	2.67	2.152	.03
Female Subjects[b]	3.37	1.30	1.00	3.484	.0001

[a] Wilcoxon matched-pairs signed ranks for extreme conditions of ego-threat.

[b] T(n = 60)

Note: Low is the At-Home condition, Moderate is the Group condition, and High is the Style (Formal and Informal)

Table 20

Standard Graphic Indices of Anxiety (SGI) on the Auto Drawing in relation to Low (at-home), Moderate (group), and High Ego-threat (style) Conditions

Entries in body of table are medians

	Ego-threat				
	Low	Moderate	High	Wilcoxon	p value[a]
Male Subjects[b]	5.12	4.25	5.70	-2.589	.01
Female Subjects[b]	5.06	4.33	5.30	-2.687	.007

[a] Wilcoxon matched-pairs signed ranks for extreme conditions of ego-threat.

[b] T(n = 60)

Note: Low is the At-Home condition, Moderate is the Group condition, and High is the Style (Formal and Informal)

coterminous with degree of ego-threat, or, more informatively, the distance (closeness to) separating a person from a potentially evaluating and powerful other person is proportional to degree of vulnerability to narcissistic injury (threat). The dip in SGIs and decrease in EGBs might simply mean that subjects were less involved in the task in thegroup. Perhaps egoistic graphic behaviors (EGBs) are more sensitive to narcissistic injury than standard graphic indices (SGIs). In any case, the corroboration for proximity is considered weak.

Hypothesis II

This hypothesis proposed that the superego reacts aggressively toward the ego in direct proportion to the activation of (a) autoerotic and/or homosexual wishes (b) incestuous wishes. Neither (a) nor (b) could be fairly tested. Nevertheless, the appropriate analyses were conducted.

The incidence of EGBs should be proportional to the intensity of libido-generating unconscious fantasies, and the incidence of SGIs should be proportional to the degree of aggression of SE toward the ego.

a-Autoerotic wishes. A positive correlation between libido and anxiety (EGB and SGI) is expected for the same-sexed drawings for each level of ego-threat (males: Tables 14 and 16, cell gd = -.39 and -.37 for low and high ego-threat respectively; females: Tables 15 and 17, cell he =

.07 and .09 for low and high ego-threat respectively). On Freud's topographic theory, gender differences are not expected. On the contrary, the correlations are negative on both levels and they tend to be larger for males. This part of the hypothesis would be discorroborated if a fair test were possible.

b- Incestuous wishes. A positive correlation between libido and anxiety (EGB and SGI) is expected for the opposite sex drawing (incestuous wish activation) for each level of ego-threat. It is understood that males ought to have higher correlation because of SE which is peculiar to them. Table 14 shows that this correlation is positive but non-significant (cell he= .07). In fact, it is the only positive one in the wish-threat matrix (cells: f-h, a-e). This anomalous correlation is positive, but not significantly different from zero, under high ego-threat (Table 16, cell he= .14). Each is significantly different from most of the other correlations in this matrix. For females, the corresponding correlations (cell gd= -.29 for low ego-threat, and -.21 for high ego-threat) are negative and significant. Moreover, correlations in both levels of ego-threat are significantly different from male values (difference > .21, Fisher's z). In terms of ANOVA terminology, these depict interactions.

Hypothesis III.

This hypothesis, which asserts that SE is unique to

males because of the threat of castration by the Oedipal rival, was not provided a fair test. Nevertheless, appropriate analyses were completed.

Unfortunately the only germane comparison (manipulation) was that of personal power (style), a between-subjects comparison which failed the manipulation checks. Employing criteria used on the same stimulus narrative by Cowden (1992), males scored higher than females on sexual mentation and, critical to this hypothesis, consummation of the "incestuous" wish. But mentation (derivatives) characterizable as castration was not more evident in their completions of the Oedipal stimulus narrative. Neither were such derivatives more evident in their stories to the Blacky castration card (Table 21).

- -

Insert Table 21 about here

- -

Neither of the two dependent measures differentiated between the two style conditions, and there were no interactions between gender and style.

Additional analysis. In the last multiple choice question following the castration card, subjects were asked to identify which of the four identified figures in the story was the one who had "most likely" arranged for the castration. Papa was the overwhelming popular choice, One

Table 21

Incidence of Sexual Mentation and Castration Wishes under Style Conditions in Relation to Gender and Type of Stimulus (Oedipal Stimulus Narrative and Blacky Card)

Entries in body of table are medians

Stimulus	Type of Mentation: Sexual	Type of Mentation: Castration
Oedipal narrative		
Male[e]	1.45_a^a	1.02^a
Female[f]	1.13_b^b	1.27^b
Castration card		
Male[e]	0.00_a^c	3.07^c
Female[f]	0.00_b^d	3.07^d

Note. Medians with the same subscripts and superscripts differ at the .05 level, Wilcoxon matched-pairs signed ranks [e](n = 40) [f](n = 40)

Note: Style combines the Formal and Informal conditions.

Sample X^2 Test (Siegel, 1956), $X^2(3, n = 80) = 56.14$, $p < .001$.

Conclusions and implications. A decision to discorroborate is moot given the failure to provide a fair test. Even if the predicted outcomes had been forthcoming, corroboration would be weak because derivability of the stimulus materials and dependent measures is wanting. The obtained outcomes could have been produced by other factorsinfluenced by the method and procedure.

Hypothesis IV

This hypothesis, which proposed that interpersonal concerns are more prominent for females and intrapsychic concerns are more prominent for males under incestuous wish activation, could not be tested fairly. Nevertheless, appropriate analyses were conducted.

Once again, the only germane comparison (manipulation) was that of personal power (style). Not surprisingly, percentage of "other-oriented" remarks from both free response stories did not achieve significance (Table 22).

- -

Insert Table 22 about here

- -

There appeared to be a disordinal interaction between experimenter style and gender on the forced choice questionnaire to the castration card. Males selected "other-oriented" statements significantly less as ego-threat

Table 22

Percentage of Other-Oriented Comments in Relation to Experimenter Style (informal versus formal) and Type of Stimulus (Oedipal Narrative and Blacky Card).

Entries in body of table are medians

Stimulus	Informal	Formal	U[a]	p value
Oedipal story				
Male[b]	56	40	175.0	.49
Female[c]	38	29	169.5	.41
Castration card				
Male[b]	53	51	190.5	.80
Female[c]	46	45	209.0	.80

[a]Mann-Whitney U test

[b](n = 40), [c](n = 40)

increased (formal condition), Mann-Whitney, U(n = 40) = 272.5, p < .02, whereas female subjects' selection was just the reverse (more "other-oriented" statements) but not significant. A test for interaction between males and females "other-oriented" statements was significant, Mann-Whitney U(n = 80) = 350.0, p < .02 (Bradley, 1968) (Figure 1). This interaction was not replicated for the other two data sets; free response Oedipus stimulus narrative and Blacky story. Contrary to this hypothesis, males consistently show more other-oriented comments then females, but the difference was not significant, Mann-Whitney U(n = 80) = 816.0, p < .877.

Insert Figure 1 about here

Conclusions and implications. The results are in accord with EI as being the better of the two instinct-restraining characterizations for both genders. However, the failure of the style manipulation (formal versus informal conditions) failed to provide a fair test of this hypothesis. The significant interaction of gender and style

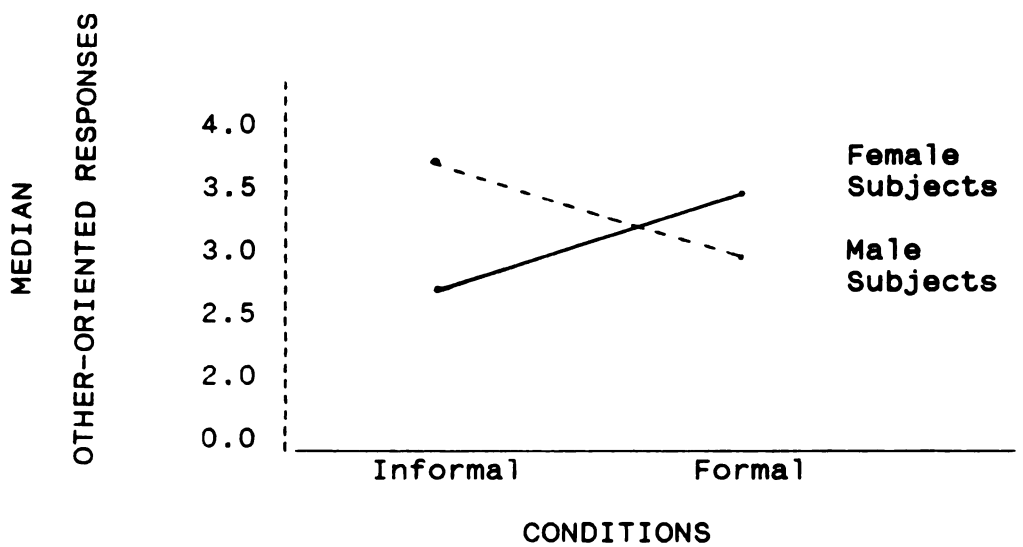

Figure 1. Selection of Other-oriented Responses to Questions following the Blacky Story

conditions for the forced choice questions is suspect for the same reasons.

Other Findings

If EGBs are vehicles of libidinal gratification and narcissistic uplifts, then they ought to parallel vicissitudes in blatancy of objective depiction of sexual anatomy (GSBS). This is not the case. The correlation between EGB and GSBS on the female body for males for the two levels of ego-threat (Tables 14 and 16, cell ea= .02, and .04 respectively). The corresponding correlations for females (Tables 15 and 17, cell da) are .46 and .17. These two measures are measuring different things, especially for males. Once again displacement of libido/EGB is implicated.

GENERAL DISCUSSION

Overall the findings are mixed in regard to ego-ideal (EI) and superego (SE), and, thereby, are more in accord with a position consistent with EI. One that is not gender-linked, is not wholly autonomous, and is integrated with Freud's early writings (Reyher, 1988). At the same time, the interaction between type of stimulus object and level of threat (difference in at-home condition that disappears in laboratory) implies an instinct restraining factor for both genders which indicates that their restraints on repressed sexual wishes are more autonomous. This, of course, implies autonomy that is masked by high ego-threat (extrapsychic stimuli). This gender nonspecific construal, which is sensitive to extrapsychic influences is most consistent with the "grade" in ego posited by Freud that characterizes EI.

The most compelling data consistent with EI and inconsistent with SE is (1) the failure of other-oriented comments by subjects to differentiate gender, and (2) by the greater production of egoistic graphic behaviors (EGBs) by females at-home. Perhaps females appear to be more libidinously reactive than males because the egoistic component of EGB is dominant, that is, they are more under the sway of the ego interests to do a good job to elicit approval and avoid disapproval from the experimenter. The data sets examined are indeterminate in this matter.

To save the construct of Superego, it is possible to

derive from it unique explanations for the effects of ego-threat on subjects; i.e., namely, projection and transference. However, these same mechanisms also can be derived from EI (Freud, 1914).

The standard graphic indices (SGIs) clearly showed increasingly more anxiety as ego-threat increased. Spatial proximity and close monitoring are major factors in increasing ego-threat - increasing the likelihood of narcissistic injury. The perceived power of the experimenter, through his or her affiliation with the university, use of university facilities, as well as their self-confidence as they go about the research protocol may trivialize even gross differences in style.

The manipulation of two of the items of Personal Power Functions Profile (PPFP) were clearly insufficient to overcome the sizeable influence of ego-threat/proximity, but it is difficult to assess how many items might have been sufficient, if it is possible at all. Even if the experimenter had been extremely casual/informal, subjects, nevertheless, would have exposed themselves to the possibility of negative evaluation and criticism upon his request for them to engage in tasks in which they are untrained.

In summary, on those views of Freud guiding this investigation, the influence of one person upon another is mediated by transference which in turn is influenced by

personal power. The subjects' sense of vulnerability (ego-threat) is presumed to be coordinate with the experimenter's perceived power (high ego-threat). In contrast, the group condition induces less vulnerability in the absence of close monitoring inherent in a one-on-one relationship. The anomalous dip in SGIs for both genders reflect the regressive aspects of group-leader dynamics. (See Freud's (1912-13, 1921) on the primal father in *Totem and Taboo* and *Group Psychology and the analysis of the ego*. The findings of the manipulation checks converge on the interpretation that power (PPFP) of the experimenter and the subjects' esteem of him or her indeed is a function of ego-threat. The more a person is able to inflict a narcissistic injury, the greater our esteem and affection and motive to please. This obviously conforms to Freud's notion of transference - a regressive transference in leader-follower relationships as well as hypnosis. It is perhaps for this reason that close proximity to the powerful experimenter washed out or trivialized items on the PPFP that otherwise would be influencing.

The manipulation checks and the vicissitudes of the graphic measures, particularly EGBs were performed in keeping with the Lakatosian perspective (Reyher, 1993a, Dar, 1987, Lakotos, 1979, Meehl, 1978); that is, if the auxiliary hypothesis and conditions, not the core commitments are in jeopardy, then either the auxiliary hypotheses or conditions

failed to transmit the "spirit" (Meehl, 1978) of the core to the dependent variables. Hypothesis I was weakly corroborated , only EGBs increased proportionately with ego-threat. Subjects appeared to be more vulnerable to narcissistic injuries as they perceive the experimenter as being of ever greater power. Both males and females showed significant reaction to the change in proximity (with the exception of the group condition) of a powerful and potentially negatively evaluating other, consistent with EI for both males and females. Laboratory close monitoring so overshadowed the effect of personal power that the manipulations utilized were deemed ineffective. Several lines of evidence were consistent with the use of displacement by males: EGBs are shifted from the female body to the auto. Displacement and condensation are the constitutive components of primary process. Reyher (1986, 1988, 1991) theoretically accommodates displacement on drawings of the human body by regarding the drawing as a paper image. The paper image is the public representation of a mental image that is subject the same vicissitudes of spontaneous visual imagery in dreams, hallucinations, Rorschach percepts (Wiseman, 1962), and emergent uncovering psychotherapy. However, being a public image, limited artistic skill, secondary process, and social anxiety diminish the starkness of primary process-driven vicissitudes. One of these vicissitudes is displacement.

Reyher has documented its ubiquity in client verbatim protocols both in the laboratory (Morishige & Reyher, 1975), under controlled conditions and, of course, in the consulting room (Reyher, 1968, 1977; Reyher & Burns, 1976).

Displacement is objectified retrospectively in emergent uncovering when the derivatives of the repressed become directly depicted and thereby are easily identified on gradients of physical, functional, and qualitative similarity. Claims to objectivity are warranted by the abrogation of interpretation and the employment of only nondirective techniques. I am adding to this corpus of literature a protocol of my own to further document such a skein of derivatives (drive displacement) and its relevance to the paper image. Direct depiction is capitalized, derivatives are italicized, and increases and decreases in remoteness/blatancy of depiction (the specific nature of repression, Freud, 1914) is denoted by superscript "+"and "-", respectively. The young lady was self-referred because of enduring depression following a divorce:

> I don't know why I'm laughing because it's not even funny. (What happened?) If I can um, - 10sec - okay, he's leaning on his left hand and his left knee and on the right side he's got a *black shoe* on. (mm,hmm) Oh god, and his pants are on but his pants are unzipped. (mm,hmm) - 7sec - And *something's* sticking out of his pants. And I think it's a *tongue* but I know it's not a tongue. (mm,hmm) - 7sec - I keep looking at his shoe-. - 12sec - (You're breathing had increased.) MM,HMM. Ha. I'm just seeing what I described. (Mm,hmm. It's alright, it's hard to talk about.) Yeah, but see I don't, I can only see from the waist down. (Mm,hmm. What is it

you're seeing?) I see a *black shoe at an angle*$^{+}$ and a *pant leg with a cuff on it* (mm,hmm) all the way up. And the zipper's unzipped and *flesh hanging out*$^{+}$. (Could you describe that to me?) When I look at it, as I look at it - 4sec - I think it looks like a *tongue*, like someone's *tongue*. But when I don't focus on it and I focus on the *black shoe*$^{-}$ then it looks like a PENIS. But when I look at directly it looks like a *tongue*$^{-}$.

Although there are other phenomena obviously taking place than displacement, they are not coded (see Reyher, 1991 for coding scheme). For our purposes on drawing the human body and the vicissitudes of EGBs, the relevance of this imagery to the paper image is obvious.

The present investigation documents the ill-advised use of the term "stress" in this research program. Reyher (1988), echoed the voice of a disgruntled cadre of stress researchers (Engel, McCabe & Schneiderman, 1985; Levine, 1986; Mikhail, 1981; White, 1987), who acknowledge the conceptual and empirical insufficiencies of this fuzzy and theoretically empty term. He jettisoned stress in favor of the theory-laden terms of low and high ego-threat which infuse the obtained data with meaning: Subjects simultaneously attempt to gratify libido-generating unconscious fantasies and obtain narcissistic uplifts while warding-off anticipated narcissistic injury. The construct of narcissistic injury is operationally definable and theoretically meaningful, to wit, the controversion (substandard product or performance) of putative

uncontrovertible remnants of infantile primary narcissism (claims of omnipotence and perfection) and the attendant fear of loss of love - anxiety. The construct of anxiety is now delimited by disturbed motor behavior, namely, SGIs.

This ongoing research program on drawing human bodies, of which this research is but a recent addition, constantly shows that, (1) the human bodies are more anxiety producing than the auto, (2) EGBs and SGIs index different processes, and (3) the auto is less affected by an increase in ego-threat. The present research has extended this program by showing that EGBs behave (have vicissitudes) as if they index libido as construed by Freud. The program also has benefitted immeasurably by the incorporation of a variety of manipulation checks and the Lakatosian perspective on research programs.

In addition, these results can be added to the body of empirical research accruing about Freud's theories. Of note, Fisher and Greenberg (1985) do not differentiate ego-ideal and superego in their summary of research on Freud's theories. Nevertheless, several of the hypotheses in this research were summarized in their text.

Research in the literature on greater superego severity in males than females was found by Fisher and Greenberg (1985) to have generally mixed results. As the style conditions were not differentiated and therefore a fair test was not provided, results as reported by Fisher

and Greenberg suggest an EI instinct restraining factor in females and SE for males; in resistance to temptation or guilt under apparent nonsurveillance, or accuracy of report of their own social behavior, males have a stronger conscience.

Rather than utilize the ego-ideal construct, Fisher and Greenberg (1985) draw from Freud's later writings (1933/1986) and examined the fear of loss of love. The present research cogently contrasts ego-ideal and superego responses to oedipal stimulation as the source of differing reponses in males and females. Again, the undifferentiated style conditions could not provide a fair test, but evidence was supportive throughout the research literature.

Finally, the empirical evidence for displacement and transference, and an objective measure of libido provide significant contributions to the psychological research and the psychoanalytic literature.

APPENDIX A

APPENDIX A

SCORING PROCEDURES FOR GRAPHIC INDICES OF ANXIETY

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. Hamernick (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, Hamernick 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, four were identified by Handler (1968) as reacting in the opposite direction as predicted. These once called "maverick" indicators are currently referred to as Egoistic Graphic Behaviors (EGBs): erasure, shading, emphasis lines, and reinforcement. The remaining six indices are referred to as Standard Graphic Indices (SGIs); transparencies, vertical imbalance, light

line-heavy line, omissions, line discontinuity, and detail, proved significant in previous research (Handler, 1964; Roach, 1981; Hamernick, 1985, 1987).

The scoring procedures in this study differ in some respects from those of Handler and Roach, but were applied as described by Hamernick (1985). Changes in the scoring schemes used by Hamernick for the present study are discussed at the end of the descriptions for each drawing variable. Each alteration was done on the basis of the results of previous research and with the purpose of increasing the correspondence between scoring schemes for the human figure and the automobile.

HUMAN BODY PARTS

Handler	Present Study
1. head (including facial features)	1. head (including facial features)
2. neck	2. neck
3. one or both hands	3. one or both hands
4. one or both feet	4. one or both feet
5 one or both legs	5. one or both legs
6. one or both arms	6. one or both arms
7. trunk	7. chest
	8. pelvic area
	9. buttocks
	10. shoulders
	11. breasts (adult female)

The expansion of body parts is as a result of delineating the trunk into four separate body areas. The inclusion of breasts as a separate category for adult females only is the sole change from Hamernick (1985).

AUTOMOBILE BODY PARTS

Roach	Present Study
1. the area forward of a vertical line drawn tangentially to the front edge of the front tire	1. door(s)
2. the area backward of a vertical line drawn tangentially to the back edge of the back tire	2. front window
3. the area above a horizontal line that is drawn between the point where the windshield meets the hood, and the point where the back window meets the trunk	3. back window
4. one or both tires	4. side window(s)
5. the remainder of the car	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)

The scoring schemes for each of the ten drawing variables are described below. All of the schemes have been expanded where necessary from the original 0-3 ratings used by Handler (1967) to 0-5 as suggested by Roach (1984) as a means of enhancing sensitivity and in order to reduce ceiling or floor effects.

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.

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 as that is a separate variable.

SCORE: Percentage of drawing that is reinforced.

SCORE:

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.

Research has consistently found this variable to be inversely related to anxiety (Handler, 1967).

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

Score:

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.

Research has consistently found this variable to be inversely related to anxiety (Handler, 1967).

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 shading occurs:

SCORE:

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.

Research has consistently found this variable to be inversely related to anxiety (Handler, 1967).

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. Thus, while crosshatching 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 breasts are drawn and which may provide three dimensional detail.
SCORE: Number of body parts which include emphasis lines.
SCORE:

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.

Research has consistently found this variable to be inversely related to anxiety (Handler, 1967).

V. 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.

SCORE:

0 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.

VI. VERTICAL IMBALANCE

This index may be scored with a protractor, as the angle the midline of the figure makes with the bottom edge of the paper. A clear acetate sheet has copied onto it graph paper with global coordinates with the aid of a xerox machine. The acetate sheet was checked with a protractor to ensure distortion did not occur. The sheet is placed over the vertical axis of the drawing with the origin placed at the bottom edge of the page with the center line dissecting the figure. The degree of vertical imbalance is read as the number of degrees the base of the page deviates from the "X" axis at the bottom of the acetate sheet.

For the automobile, the horizontal line follows the bottom edge of the auto, and the vertical line intersects the midpoint between the tires. The origin of the axes on the acetate sheet is placed along the bottom of the page,

the deviation from vertical is noted.

SCORE: Number of whole degrees, truncated to whole numbers, i.e., an angle of 15.5 degrees is scored as 15.

SCORE:

0 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.

While the use of a protractor is not new, the photostat of global graph paper onto a clear acetate sheet was expected to reduce errors in reading the protractor.

VII. 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 consist of CLEARPRINT PAPER No. 1000HP, translucent, 100% new cotton fiber, typically used for tracing, drawing and drafting. The manufacturer is CLEARPRINT PAPER CO., Emeryville, California. A standard light source used throughout the scoring procedure consisted of a 60 watt bulb in a desk lamp, positioned 12 inches above the drawing.

SCORE: Number of overlays required for drawing to be obscured.

SCORE:

0 if more than half of the drawing is lost with 0-5 overlays.

1 if more than half of the drawing is lost with 6 overlays.

2 if more than half of the drawing is lost with 7 overlays.

3 if more than half of the drawing is lost with 8 overlays.

4 if more than half of the drawing is lost with 9 overlays.

5 if more than half of the drawing is lost with 10 or more overlays.

The use of overlays was an attempt to avoid the cumbersome process of using alternating layers of white

paper and carbon paper for each drawing, and to avoid the rater scoring "drift" which is inevitable with trying to standardized line lightness and darkness.

VIII. 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.

SCORE:

0 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.

IX. 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.

SCORE:

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.

X. 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: Score the number of additional details included, <u>not</u> omitted.

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 pockets, 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:

0 when there is NO to three (0-3) additional details.

1 when there are four to six (4-6) additional details.

2 when there are seven to nine (7-9) additional details.

3 when there are ten to twelve (10-12) additional details.

4 when there are thirteen to fifteen (13-15) additional details.

5 when there are sixteen (16) or more additional details.

The list of details was found to be comprehensive as few details were drawn on either a human figure or the automobile which were not listed above. To positively correlate with anxiety, this anxiety measure was inverted, i.e., scoring detail absence.

APPENDIX B

APPENDIX B

CASTRATION BLATANCY SCALE

The original intent was to create a scheme which would allow the scoring of castration severity or castration anxiety. Schwartz (1956a) described a scoring scheme for castration anxiety which his research identified as multidimensional. General ideas from Schwartz (1956b) were incorporated into the Castration Blatancy Scale used in this study, but his exact scale was not used because of methodological inconsistencies observed. Attempts to measure the severity of castration fears directly were abandoned as each story provided by a subject was thought to be the result of potential alterations by interpersonal and intrapsychic variables (defense mechanism etc.). In reality, this scale can at best assume that it is positively correlated to the severity of castration anxiety through how blatant that castration has been depicted in the stories produced by the subject.

The reliability of this measure was obtained through the use of volunteer raters, all of whom were clinically experienced, and included MSU advanced practicum students, psychology doctoral students in their internship at Oakland University, and clinically experienced psychologists of various theoretical disciplines from the Oakland University

Counseling Center staff. Each was asked to rank order a random list of possible story themes/outcomes. A Kendall Coefficient of Concordance was calculated to be 0.984 for 15 rankings of 6 items on the scale ($p<.01$).

This scale was intended to measure the threat in the story, and draws upon the subject's descriptions of the threat, associations to the threat, and behavioral descriptions as a means of assessing the blatancy of the threat. Other figures in the story, while self objects, were not considered as salient a projective object (castratable object) as the main figure in the story, themselves. Scoring was limited to behaviors which were done to or by the subject in the story. In addition, under #2, loss of object, extension of body image, a note left by the subject was assessed to be a self-representation as it was created by them and given to or left for the oedipal figure, typically as some reminder of them such as a telephone number. Of particular difficulty was the recognition that yelling, or being yelled at was not specifically included in the blatancy scale and does not clearly fit into any of the categories. Being yelled at was assessed as fitting into the range between #2 and #3 and upon revision, might be added between these two. Being yelled at is the verbal equivalent to a physical beating and is referred that way in idioms, (verbal thrashing, verbal beating, brow beating etc). In this study, yelling was

scored #3. Sometimes, raters found that several scores could have been provided depending on which part of the story was addressed. It was decided that the highest score depicted in the story would be used as it determined the most blatant form of castration.

CASTRATION BLATANCY SCALE

0._____ **No threat, Absence of loss and injury.**
lack of separation, lack of loss, and decreased distance of desired object from hero of the story.
(We move closer, We keep doing what we were doing)

1._____ **Physical separation from desired object**
absence, removal or distancing of stimulating desired objects from the hero of the story.
(leaving the room, saying good-by, lack of availability

2._____ **Damage to or loss of extension of the body image**
loss of prized possessions which may symbolize the self of parts of self.
(camera, weapons, watches, keys, money, etc.)

3._____ **Damage to or loss of other parts of the body**
damage to any part of the body other than genitalia (broke my arm, leg etc.)
wounds to or operations upon limbs, thorax, or abdomen (cut open, surgery, non-fatally stabbed)
beating, torture, illness
(bound and gagged, physically abused, beat-up etc)

4._____ **Total, mutilative destruction of the body penis.**
death, destruction, or fatal injury to a person.
(I'd get killed, I'd die, I'd get shot to death)

5._____ **Genital Injury or loss.**
unsymbolized representations of actual injury to the genitalia (regardless of gender)
(my penis was cut off, I'd get castrated)

APPENDIX C

APPENDIX C

PERSONAL POWER FUNCTIONS PROFILE (PPFP)

Reyher (1979) defined sixteen variables which contribute to an attribution of personal power. Ten of these were incorporated and could be rated by subjects quickly, while six were excluded as they could not be manipulated. The six which were excluded are: Education (all experimenters were college students), Authority-Occupation (all experimenters held the position of "experimenter"), Personal Fame and Family Fame (self-disclosure was not an identified part of the research protocol), Knowledge/Ability/Talent (all experimenters were trained on the protocol and equipment prior to their contact with subjects).

Please consider each of the following dimensions as they apply to your experimenter. Rate your experimenter on each dimension by checking the number which corresponds to the most accurate description of your experimenter. Be sure to check the choice for each of the ten dimensions.

1. Physical Attractiveness
   ____ 1. ugly
   ____ 2. ...
   ____ 3. plain
   ____ 4. ...
   ____ 5. beautiful/very handsome

2. Height
   ____ 1. 5'0"
   ____ 2. 5'5"
   ____ 3. 5'10"
   ____ 4. 6'3"
   ____ 5. 6'8"

3. Stature
   ____ 1. frail
   ____ 2. ...
   ____ 3. medium build
   ____ 4. ...
   ____ 5. very well built

4. Etiquette
   ____ 1. socially simple
   ____ 2. ...
   ____ 3. rough at the edges
   ____ 4. ...
   ____ 5. charmingly skilled

5. Socioeconomic Status
   ____ 1. lower class
   ____ 2. ...
   ____ 3. middle class
   ____ 4. ...
   ____ 5. upper class

6. Attire
   ____ 1. street person
   ____ 2. discount store
   ____ 3. department store
   ____ 4. specialty store
   ____ 5. high fashion

7. Speech
   ____ 1. stutter
   ____ 2. stammer
   ____ 3. halting, hesitant
   ____ 4. fluid
   ____ 5. eloquent

8. Carriage
   ____ 1. slumped,head bowed
   ____ 2. head bowed
   ____ 3. slouches some, eyes downcast
   ____ 4. erect body, but head not high
   ____ 5. body erect and head high (poised)

9. Eye Contact
   ____ 1. 0%
   ____ 2. 25%
   ____ 3. 50%
   ____ 4. 75%
   ____ 5. 100%

10. Voice
   ____ 1. high, diminutive
   ____ 2. ...
   ____ 3. moderate
   ____ 4. ...
   ____ 5. full, overtones, color

APPENDIX D

APPENDIX D

Security Measures Inventory

1. **Interrupting** Something said by listener before speaker finishes sentence or makes point.

2. **Repartee** Saying anything to elaborate on what speaker says and prompts speaker to reply in kind, particularly wit and put down. Speaker usually laughs or smiles.

3. **Dramatization** Speaker's use of colorful language builds up events by "putting you there."

4. **Sentence Finishing I** Listener finishes sentence when he has not been asked or pressured to finish sentence or his/her opinion asked.

5. **Teasing** Speaker saying something designed to put person listening in a bad light, ostensibly harmless form. Or speaker tempting a listener without providing gratification. (Speaker usually laughs or smiles.)

6. **Turning the tables** Listener reversing role of listener and questioner or persecutor-defendant or active-passive. Knowing- listener or speaker provides answer or insight being right, speaker or listener is proven right or comment is considered to be right/correct.

7. **Humor** Speaker saying anything designed to elicit laughter; allusions, jokes, puns, goals, and gaffes. (speaker usually laughs or smiles.)

8. **Arm twisting with ratification expected or N'est pas** Question following an assertion attempting to gain agreement. "Isn't that right?" "Isn't it?"

9. **Pasted on smile** Inappropriate, continuous smiling when circumstances do not warrant it.

10. **Incessant talking** Speaker does not allow listener to say anything. Will not assume role of listener.

11. **Changing topics** Listener introduces new topic before completion of current topic.

12. **Flashlight smile** Inappropriate quick smile when circumstances do not warrant it.

13. **Annoyance (impatience)** Speaker acts displeased.

14. **Security blanket** Bootstrapping comments by speaker (1) name dropping, (2) prestige association (clubs, cars, boats), (3) calls attention of apparel and possessions, (4) bragging: calling attention to self in a favorable way.

15. **Connecting (yea-saying)** Listener saying something to place self on good side of speaker. "I agree" or "I approve" or "me too." Listener saying something to formally impress speaker when comment is misdirected. "I know him" "I've been there."

16. **Placating (flattery)** Unsolicited comments by either party designed to enhance other's self-esteem.

17. **Headnodding II** Listener nods head (side to side) when he has not been asked or pressured to agree or his/her opinion asked.

18. **Disparagement** Speaker saying anything to reduce the esteem in which the listener may hold someone or something. Create a bad impression.

19. **Side stepping** Listener does not answer question, instead talks about something else that is relevant but off the point.

20. **Headnodding I** Listener nods head (up and down) when he has not been asked or pressured to agree or his/her opinion asked.

21. **"I'm alright" (Dissembling)** Speaker or listener saying anything to present oneself as being "together" "cool" "on top of things" when confronting or having confronted dystonia inducing or possibly dystonia producing event/circumstances. Not feeling dystonia when he/she ought to. May see indifference also.

22. **Obsequiousness** When listener initiates comments or activity (i.e., getting chair, ashtray) in absence of request or obvious cue (unsolicited) to provide physical comfort or solace (reassurance). Includes offering to do favors.

23. **Character Building I** Speaker describes dystonia-inducing past events (mishaps, misfortunes), inspires admiration by asserting trials, endurance, or having overcome obstacles.

24. **Questioning (Confronting)** Speaker asks questions which require listener to justify what he is saying. Listener asks question designed to make speaker look good, i.e. being knowledgeable, interesting.

25. **Diffidence** When listener responds to speaker by placing speaker's needs, comfort, convenience first, with or without justification.

26. **Qualifying** Speaker qualifies own statements. Listener qualifies statement of others.

27. **Exemption ("I'm just a housewife")** Speaker or listener saying anything to exclude self from evaluation/responsibility.

28. **Character Building II** Security operation insight: comments which specify behavior that either (1) denotes a conscious striving to make a good impression, (2) denotes a conscious striving to avoid making a bad impression.

29. **Self justifying** Speaker saying anything to prevent self from being criticized or creating bad impression in listener. E.g. Rationalization, excuses.

30. **Character Building III** Self-abnegation: speaker devalues self to listener.

31. **Reassurance** Speaker asks questions directly soliciting reassurance from listener, e.g: "Am I doing all right?" "Is this OK?".

32. **Taciturn-reticence** Neither initiating new topics nor elaborating on topics or questions introduced by speaker.

33. **Word substitution (rephrasing)** Speaker replaces or rephrases own words or words of others.

34. **Automatic laughter** Inappropriate laughter, nothing funny happened.

APPENDIX E

APPENDIX E

SELF-ORIENTED/OTHER-ORIENTED SCALE

This scale scores phrases from the perspective of the main character in a story. The style of the comments of primary interest, and in particular, whether the author of the story includes others in relation to themselves.

Self-oriented:

These phrases include thoughts, feelings, and behaviors made by the main character in the story in which another character is not included. Therefore, comments by the author describing the main character as "tired", "angry", or "sitting on the sofa" are scored as "self-oriented".

Other-oriented:

These phrases include thoughts, feelings, and behaviors made by the main character in which another character is referenced. These comments by the author about the main character might think or say, "He made me tired", "I am angry about what he did", or "I sat down next to him on the sofa."

APPENDIX F

APPENDIX F

STIMULUS NARRATIVE

The stimulus narrative was recorded on an audiocassette tape and played for each subject by the experimenter, thus each male subject heard exactly the same story as every other male, and each female subject heard exactly the same story as every other female. The stimulus story had two versions, one for male subjects and one for female subjects, both tapes recorded by the same individual. The differences between the two stories included changing pronouns where appropriate and gender dependent language such as perfume and cologne. The story for male subjects was 6'50" in length and the story for female subjects was 6'57" in length. The five experimenters were each privately queried about the differences which might exist between the two tapes and unanimously claimed the necessary changes in language were the only identifiable differences.

The stimulus for male subjects is provided. Words which were changed for the version presented to female subjects are provided in parentheses.

STIMULUS NARRATIVE TRANSCRIPT

It's a warm summery day and you're walking leisurely to a bus stop. As you approach the stop, you're attention is drawn to a very sophisticated looking attractive older woman (man) who seems to be rummaging through her purse (his wallet). Concerned, and without a moments hesitation you say "Anything I can do to help?" She (He) looks directly into your eyes for a long moment and says with a faint smile "As a matter of fact you can. Tell me you have found my change purse (wallet) and are returning it. Or, if that's not the case, make me invisible, so that I can get on the bus unnoticed." A glint in her (his) eye along with a faint smile, reveals that she (he) is not freaked by her (his) plight and that she (he) welcomes your offer of help. There is a good feeling between the two of you right away, right off. And before you know it, you both are walking around in overlapping and widening circles looking for her change purse (his wallet) and exclaiming your good fortune each time you see an empty beer can, an empty packet of cigarettes, a gum wrapper, and so forth, thinking of some ridiculous way you could use each one of them. You are really having a good time. She (He) is a fun person. It is all that more delightful because of her (his) sophisticated appearance and good looks. You both give up the search for

her (his) lost change purse (wallet) at the same moment, standing facing each other, she (he) with a forlorn look while you express your disappointment with a sigh. Although she (he) is approaching middle age, she (he) looks like a helpless lost girl (boy). Her (His) girlish features, crested by a contemporary hairstyle slightly tinged with gray is a study in contrast. Not knowing what else to do, her (his) obviously well proportioned body is immobilized. Without any inward hesitation whatsoever you hear yourself say "If you turn around and step into that approaching bus, I'll pay your fare." The forlorn look vanishes from her (his) face, she (he) looks directly into your eyes, her (his) lips part slightly as if she (he) is about to speak, but instead she (he) takes your hand, turns around, and gracefully steps up into the bus. The next thing you know is that you are standing next to her (him), placing the exact fare into the receptacle. She's (He's) still holding your hand as you both settle into a seat and she (he) squeezes your hand and says "I found a friend." Her (His) wedding band presses into your hand, but this does not seem to be important, neither is the fact that she (he) could have children your own age. She (He) asks you about yourself and it seems like you tell her (him) your whole life history without any self consciousness what so ever. And at times, she (he) adds one or another thing about herself (himself). Suddenly she (he) says, "Let's go to my

place." And rises, holding your hand, in a warm gentle clasp, which you find extremely pleasant and leads you down the aisle to the exit of the bus. As you step from the bus, it seems like you go directly to the apartment building where she (he) lives. Still holding your hand, she (he) ushers you into a beautifully furnished apartment, where you nestle into a large soft sofa, while she (he) pours you a glass of wine and turns on the stereo. She (He) sits down next to you, raises her (his) glass and offers a toast to a beautiful day and a long friendship. You clink glasses looking directly into each other's eyes as you take the first sip. In the ensuing conversation, you talk about the quality of the wine, the unusual sofa in which you're sitting, the statues, pictures and other art objects around her (his) apartment, but most of all you find yourself preoccupied with your feelings that this warm accepting sensual woman (man) is producing in you. Once again you are impressed with the special attractiveness that maturity adds. She (He) sets aside her (his) drink, touches your hand, rises, which is a signal for you to get up too. As you do, you take her (him) in your arms, draw her (him) close and begin dancing to the soft music from the stereo. It is the right thing to do at the right time. Everything about her (him) is appealing. Her (His) height, her (his) graceful movements, her perfume (his cologne), all of your senses are pleasantly stimulated. And you can tell from her

(his) breathing, and the way she (he) brushes her (his) lips against the side of your neck that she (he) is sexually stimulated and you realize that you are too. There is the ring of a telephone in the next room. She (He) groans with dismay, then whispers in your ear, "Stay right where you are. I'll be back in a moment." You watch her feline (his catlike) graceful movements as she (he) walks and disappears into the adjoining room, closing the door. But just standing there won't do. You pick up your glass of wine and nestle into the velvety softness of the sofa. It gives way, almost enveloping you as you stretch out your body. You now concentrate on the smell of the wine, the sensation it produces on your lips and tongue as you sip. And of course, revel in its delicious taste. You eagerly wait for her (his) return.

APPENDIX G

APPENDIX G

QUESTIONS FOLLOWING BLACKY STORY

Following each story to The Adventures of Blacky castration card, a list of eight questions were asked of each subject to aid in clarifying the major points in the story. These questions were originally provided by Blum (1949), but the multiple choice responses were unbalanced. The revision used in this research provided a full range of multiple choice answers and similar questions asked of both male subjects and female subjects.

Both the male version and the female version are reproduced.

The following are several questions to help clarify what you meant in the story you just finished to the cartoon. Select the letter which most closely fits what you had in mind. First impressions are usually best.

1. How does Blacky feel about his own tail?
   a. He's not particularly worried about it.
   b. He thinks he might look more like other dogs if his tail was cut off.
   c. He's thinking desperately about a way to save it.
   d. He so upset he wishes he never heard the other dogs talk about tails.
2. What does Blacky suspect might be the reason for this scene?
   a. He suspects Tippy is being punished by someone for having done something wrong.
   b. He suspects Tippy feels quite guilty.
   c. He suspects Tippy is an innocent victim of someone else's ideas.
   d. He suspects Tippy is being improved in some way.
3. What would Blacky be most upset about if he were in Tippy's place?
   a. The fact that no one loved him enough to prevent this from happening.
   b. The fact that he would not have his tail anymore.
   c. The fact that others would think his short tail was strange.
   d. The fact that he had allowed himself to be bad enough to deserve this.
4. How does Blacky feel here?
   a. Terrified that he's going to be next.
   b. Puzzled and upset because he doesn't know whom Tippy hurt to deserve this.
   c. Curious but calm, wondering about how Tippy's tail will look.
   d. Angry that he can't talk someone out of hurting Tippy.
5. How will Tippy feel afterward about having had the tail cut off?
   a. Tippy will be envious of dogs that have tails to wag.
   b. Tippy will try to make the best of a bad situation.
   c. Tippy will be proud to be different from the others.
   d. Tippy will be frightened by the loss of the tail.
6. What will other dogs in the neighborhood do when they see Tippy's tail is cut short?
   a. Start worrying about their own tails.
   b. Make fun of Tippy.
   c. Wonder what is going on.
   d. Admire Tippy.
7. Which family member most likely arranged for Tippy's tail to be cut off?
   a. Papa b. Mama c. Blacky d. Tippy

8. Do you suppose Blacky would prefer to have the tail cut off right away rather than go through the suspense of wondering if it will happen to him? ...Why?

Blacky Questions for Female Subjects
The following are several questions to help clarify what you meant in the story you just finished to the cartoon. Select the letter which most closely fits what you had in mind. First impressions are usually best.

1. How does Blacky feel about her own tail?
   a. She's not particularly worried about it.
   b. She thinks she might look more like other dogs if her tail was cut off.
   c. She's thinking desperately about a way to save it.
   d. She's so upset she wishes she never heard the other dogs talk about tails.
2. What does Blacky suspect might be the reason for this scene?
   a. She suspects Tippy is being punished by someone for having done something wrong.
   b. She suspects Tippy feels quite guilty.
   c. She suspects Tippy is an innocent victim of someone else's ideas.
   d. She suspects Tippy is being improved in some way.
3. What would Blacky be most upset about if she were in Tippy's place?
   a. The fact that no one loved her enough to prevent this from happening.
   b. The fact that she would not have her tail anymore.
   c. The fact that others would think her short tail was strange.
   d. The fact that she had allowed herself to be bad enough to deserve this.
4. How does Blacky feel here?
   a. Terrified that she's going to be next.
   b. Puzzled and upset because she doesn't know whom Tippy hurt to deserve this.
   c. Curious but calm, wondering about how Tippy's tail will look.
   d. Angry that she can't talk someone out of hurting Tippy.
5. How will Tippy feel afterward about having had the tail cut off?
   a. Tippy will be envious of dogs that have tails to wag.
   b. Tippy will try to make the best of a bad situation.
   c. Tippy will be proud to be different from the others.
   d. Tippy will be frightened by the loss of the tail.
6. What will other dogs in the neighborhood do when they see Tippy's tail is cut short?
   a. Start worrying about their own tails.
   b. Make fun of Tippy.

c. Wonder what is going on.
d. Admire Tippy.

7. Which family member most likely arranged for Tippy's tail to be cut off?
   a. Papa b. Mama c. Blacky d. Tippy
8. Do you suppose Blacky would prefer to have the tail cut off right away rather than go through the suspense of wondering if it will happen to her? ...Why?

APPENDIX H

APPENDIX H

FIGURE DRAWING AND IMAGERY FEEDBACK SHEET

The experiment you completed utilized your ability to visualize objects and events. With a request to draw a figure, an image of the object is typically created and the resulting figure is "copied" from the internal image. As might be intuited, individuals have different responses to geometric figures than to human figures. These effects are thought to be displayed in the drawings and may be exaggerated depending on the presence of authorities (such as experimenters) and the experimental settings in which the drawings are done.

The story you heard typically provides a visual image of the events. The ending you provide allows us the opportunity to infer the influence the story and imagery can have. The story you created to the cartoon which followed the taped story, provided another measure of the influence of the taped story. It is the different responses we receive to these figures and stories which is of interest to us.

The data collected provides important and confidential information concerning intrapersonal as well as interpersonal variables and their influence on performance. These variables are being more completely understood through your time and effort. Thank-you for participating.

APPENDIX I

APPENDIX I

EXPERIENCE IN TODAY'S SESSION

Indicate your subjective, personal impression of how the experimenter interacted with you today on the following scales. Circle the number which best fits your impression.

THE EXPERIMENTER:	VERY LITTLE		MODERATELY		VERY MUCH
- TREATED ME WITH CONSIDERATION	1	2	3	4	5
- TREATED ME WITH RESPECT	1	2	3	4	5
- WAS FRIENDLY	1	2	3	4	5
- WAS LIKABLE	1	2	3	4	5

Circle your degree of motivation to do this task:

1	2	3	4	5
highly motivated	moderately motivated	indifferent	slightly motivated	not at all motivated

Comments:

APPENDIX J

APPENDIX J

Graphic Sexual Blatancy Scale

The blatancy of sexual depiction was quantified using the Graphic Sexual Blatancy Scale (Reyher, 1984). Human figure drawings were scored for sexual blatancy as follows:

Clothed body

Points	Male	Female
1	revealing clothes	revealing clothes
2	chest hair	full lips
3	defined hips	defined hips
4	bulging genitalia	bulging breasts

Nude body and transparencies (see through)

Points (10 is added to each score)		
1	pubic hair	pubic hair
2	scrotum	breasts
3	flaccid penis	nipples
4	erect penis	receptive pose

Scores range from 0 - 20 (maximum of 10 for each sex) on clothed scale and from 11 to 100 on nude scale (maximum of 50 [11 + 12 + 13 + 14] each sex). Transparencies on the clothed body are added to total clothed score.

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