

HANDWRITING
EXAMINATION:
CAN IT HELP IN
ESTABLISHING
AUTHENTICITY IN
DISSOCIATIVE IDENTITY
DISORDER?

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ABSTRACT

Questions with regard to the genuineness of amnesia and DID in forensic settings have been of considerable past concern in trials of accused criminals claiming amnesia, accused perpetrators of incest and psychotherapists accused of negligently implanting memories or creating DID symptoms. This study has used document examination methods to investigate 30 different manuscripts suspected to have been mailed by three alters of a DID patient. In the present single case study we have found that despite the striking differences between the three handwritings identified, single authorship of the documents could be established. We have also shown that these handwritings could not have been a result of conscious disguise, and we were thus able to determine the authenticity of the phenomenon. Forensic implications of these findings are discussed.

The syndrome of dissociative identity disorder (DID) has recently been a source of some controversy (Bliss, 1988; Dell, 1988a; Dell, 1988b; Goodwin, 1985; Kluft, 1987; Ross, 1989). It has been proposed that personality alters were the creation of naive therapists or that the personality splits were no more than dramatic role-playing by histrionic or malingering patients eager to please their therapists (Spanos, 1996). The genuineness of the phenomenon is a question of concern not only to psychotherapists but also to forensic experts. The importance of this question and the difficulties of determining whether a criminal has a real DID or not were reflected in the debate about Kenneth Bianchi, the "Hillside Strangler" (Orne, Dinges, & Orne, 1984; Watkins, 1984). Addressing this concern, the *DSM-IV* (American Psychiatric Association, 1994) suggested that DID "must be distinguished from malingering in situations in which there may

be financial or forensic gain..." (p. 487). Kluft (1984) defined an alter personality in DID as "an entity with a firm, persistent and well-founded sense of self and a characteristic and consistent pattern of behavior and feelings in response to given stimuli." Handwriting is considered to be a complex product of a long period of modification of the form learned at elementary school and its adaptation to the writer's character and temperament. As such, this parameter could give us some clues as to whether given DID alters represent some form of malingering or disguise; or whether it is a genuine consistency of dissociated personality patterns.

The existence of different handwritings in DID patients has been reported before (Braun, 1983; Kluft, 1987; Putnam, 1989). The significance of these differences compared with the normal range of variation in handwriting expected in the general population has also been documented (Yank, 1991).

A developed handwriting is characterized by specific departures from the copybook practice which permit its identification beyond reasonable doubt. When presented with different handwritings we are mostly impressed by the general pictorial effect of the script. We can differentiate between handwritings or even recognize them even by superficial examinations. In order to determine identity versus disguise of questioned handwritings, the forensic system usually consults a document examiner who uses a variety of procedures, typically including handwriting examination. The document examiner studies letter design and size on two or more documents. After studying the markings of the questioned documents the expert ventures an opinion about whether the same person wrote the documents.

The examination of handwritings suspected of having been executed by different alters of a DID patient should not only address the question of identity (namely, are different people responsible for the production of the pictorially variant handwritings, or is this the making of one individual?) but also that of disguise. Disguise is defined as handwriting with the idea of hiding or forging identity. It can occur in cases in which forensic or financial gain might be expected if a DID diagnosis is accepted.

To determine whether or not unusual changes in the handwriting specimens of any one person could be attributed to conscious role playing or disguise, several of the prin-

ciples suggested by Harrison (1966) should be borne in mind. For example, most disguise is relatively simple in nature and involves attempts at changing the general pictorial effect. The intense concentration required for the maintenance of a complex scheme of disguise is beyond the capability of the average person. It is also very difficult to consistently and reliably alter inconspicuous characters of the written letters. Ornamentation habits, marginal habits, line spacing, word spacing, inset of paragraphs are all rarely affected by the disguise.

This paper examines handwriting specimens received as letters from a DID patient of the first author (E.S.). Many of these letters were anonymous or were suspected of being written by alters who professed to having malicious intent to hurt the first author, his spouse, and the host personality, and then place blame on the host personality. The purposes of the current single-case study were to try to determine: 1) if the various writings in the suspect letters mailed to the first author resemble spontaneous minor variations expected to be observed in people's script; 2) whether or not the different handwritings could have been written by one person, or were they rather more likely the productions of more than one individual; and 3) if indeed, in all likelihood, the handwritings had been written by the same person, could this be an authentic phenomenon or could it possibly be a result of disguise or forgery?

THE CASE

Ruth was 39 years old when she was referred to the first author for treatment. By the time of referral, she already had a long history of suicidal behaviors, psychiatric treatments, and hospitalizations. She was the victim of prolonged and cruel paternal incest and of several other instances of sexual abuse.

About three months into the treatment, accumulated clinical evidence warranted the diagnosis of dissociative identity disorder (DID). This diagnosis was later independently confirmed by two other consulting psychologists. Eight months after the initial DID diagnosis the first author (E.S.) received a letter from Ruth, mailed to his home address. It was a first in a series of 118 letters sent, many of which were anonymous, to both his office and home addresses over a period of 15 months by what were suspected to be different personality alters of Ruth. The patient had seven known alters: 1) *Ruth*: The host personality gave the impression of a highly anxious, deeply depressed and confused woman with borderline personality features. 2) *Ruthie*: a persecutor-demon personality, the introjected brutal parent, perceived by Ruth as possessing an evil spirit; 3) *Ruthette*: seductive and promiscuous, she had her own separate sexy wardrobe; 4) *Hope*: a protector internal self-helper and an excellent consultant and ally to the therapist; 5) *The Little One*: a five-year-old child alter, frightened by the "big monster in the house";

6) *Jerry*: a suicidal alter of opposite sex who assumed the identity of a loved cousin who committed suicide in her early adulthood; and 7) *R*: a talented, withdrawn, adolescent poet.

METHOD

Handwriting Samples

Three distinct groups from the suspect handwriting collection comprised of ten letters each were studied. The specimens were impressionistically sampled by the first author from a pool of 118 dated letters received. They were retrieved from three four-week periods, six months apart, as determined by the postmarks on the envelopes. Each sample covered at least one sheet of 17cm x 24cm paper. The 30 specimens had all identifying data removed and were numerically coded before being submitted to a registered document examiner for blind investigation.

Measuring System

No standard measuring method has yet been universally accepted as the recommended method for identification of suspect documents. This investigation followed the methodology developed by Harrison (1966) and Sandek (1926/1978) because we felt they offered a convincingly reliable method for assessing the likelihood of disguise in document examination. The investigative method involved the visual comparison of randomly sampled graphical elements such as commas, letter parts, whole letters, full words, as well as comparisons of whole segments of the handwriting samples.

Equipment

The handwritings were studied with the naked eye, with a magnifying glass and under ten- to forty-power magnifications through an American Optical comparison microscope. The magnified images were photographed by a Mirax Labrec microscope camera and the resulting pictures were then subjected to investigation.

Procedure

During the time the document examination took place, the collaborating specialist had no knowledge about DID or that the therapist was treating DID patients. The suspect letters had been shuffled prior to being handed over to the document examiner for investigation. He was then given the following instructions: "Enclosed are thirty letters I have received. I am unsure about the identity of the authors. Since I have never received such a barrage of suspect letters before, we would need your help to identify the author or authors of these seemingly variant handwritings. Firstly, could these letters represent the normal expected variations of the same longhand? Conversely, could these letters have been produced by more than one individual? If you conclude these specimens are the works of one individual, could you establish whether this is a disguise or a genuine phenomenon?"

FIGURE 1
Handwriting A

I appreciate your telephone call to Donna yesterday, an encouraging move. Although I also heard her reluctance admit herself to return to therapy. For some reason, I do understand, I am not fully aware of the entire contents of that conversation. I know you asked Donna to schedule an appointment but I do not think you can overcome her resistance alone. Please schedule an appointment on a Friday evening after her regular Girl Scout meeting. Her presence is strong during that time and this will help

FIGURE 2
Handwriting B

On your own, you have effectively in your
invasive approach that surpasses
my evil cunning. The enchantment
is that you in yourself have
part of the problem rather
the past, part of the solution
commitment, in your eyes, only
as it's convenient to you. I
ling abandonment has ripped and

word "I," and were searched for evidence that these letters were indeed written over a prolonged period of time rather than at one sitting (a condition that can make forgery easier). In a post-hoc investigation the first author contributed to the latter analysis by comparing the contents of the letters with available clinical data from Ruth's therapy.

RESULTS

Variability

Three groups of handwritings were identified, clustered, and labeled group A, B, and C (see Figures 1, 2, and 3). The three sets of long-hand appeared to be consistent both throughout each document and across documents. The samples seemed to be pictorially so distinct from each other that the clear initial impression was that these handwritings could belong to different persons. Sets A, B, and C were identical in their item composition to those originally formed by me (E.S.). This demonstrated perfect inter-judge reliability as far as the script's distinction was concerned.

Numerous graphical motifs uniquely characterized each set. For example, the word "I," which can be considered

The document examiner proceeded to divide the handwriting samples into three groups which he impressionistically felt were internally consistent and homogeneous.

The differences among the groups were then characterized. The documents were studied in terms of internal consistency, flow and rhythm of movement, pattern of the

as having meaningful projective properties, was characterized by extreme between-group divergence. Additionally, handwriting A consisted of non-cursive rounded letters of medium to small size, written in an accurate manner with rounded girlrands and at right-angles to the line. The pace

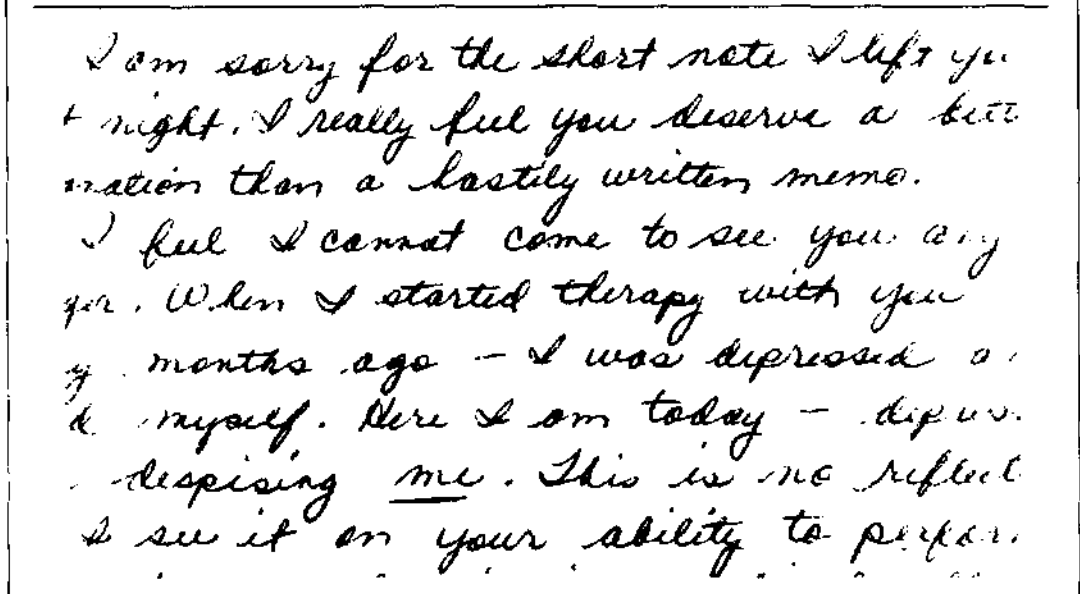
and flow of the writing seemed to have been controlled and slow. Handwriting B was also non-cursive, but it had much poorer graphic quality. The script was tremorous, and the lines were sometimes broken. As a result, round shapes seemed at times to be incomplete. Other letters appeared to be very thin, depleted of any volume, occasionally lacking loops and at times represented by single lines. Handwriting C was written in a cursive style, with a seemingly higher speed of writing. The forms were characterized by rounded figures and loops with a sideways expansion. The script leaned forward (at a right slant) and was characterized by "tails" that were added to some letters at the beginning and the end of words, and by internal loops observed mostly inside round-shaped letters.

The impressions of the document examiner concerning the three groups of handwriting led him to conclude that they did not resemble normal changeability and variation typically resulting from transient physiological or psychological states, and thus could initially be suspected of having been produced by different writers.

The Question of Singular Authorship

1) Further study of the handwriting samples revealed that all three groups shared problems in movement. Flow of movement, particularly in groups A and B, was usually flawed and was characterized by elongated initial lines, elaborate initial and terminal strokes, interruptions in writing continuity, and disharmonious alterations of pen pressure. Flow disturbances in set A could be demonstrated by the overuse of block letters, especially letters F and K (e.g., center of fourth line down in Figure 1: ...fully aware of...). Problems in the line flow are clearly observed in the general tremor and bending of shapes in script B (e.g., the last word on Figure 2: ...ripped). While group C seemed to have had a smoother flow of writing, the movement was nevertheless assessed to have been strained, stilted, and artificially paced. The almost calligraphic ornamentations such as in the word *I* are a case in point.

FIGURE 3
Handwriting C



- 2) Writings A, B, and C maintained very similar size ratios among letters, words, and inter-word spacings. In different comparisons that were made, further similarities, (some very inconspicuous) were found.
- 3) Scripts A and B, written on lined paper, maintained an overall excellent adherence to the lines.
- 4) Several letter patterns were found to be identical, for instance, the letter "r" in sets A and B (e.g., *girl*, second line up in Figure 1; in Figure 2, *part*, fourth line up). Another illustration is the reinforced straight foot of the letter *p* in sets A and C (e.g., *therapy*, third line down in script A, and fifth line down in script B). Scripts A and B contained very similar inconspicuous patterns of the letter *f* (e.g., *of*, fourth line down in set A and fourth line up in set B). The word *I* is usually taller than the rest of the script in most handwritings. In all three sets of long-hand investigated in this study, the word *I* is presented with small appearance (e.g., in set A, fourth line up ...but *I do not...* and in set C, fifth line up, *when I started...*).

All three handwritings contain pattern similarities in the tails and girlands of small letters, *a*, *u* and *e* (e.g., in the letter *e* in the words *appreciate*, first line script A; *mitment*, third line up, script B; and *see*, fourth line down, script C.) The *ts* in all three sets are crossed at a relatively low location compared with the general line of words (e.g., last line, set A; *that*, second line up, set B; *convenient*, and first line, set C; *left*). Another indicator of single authorship was a unique placement of the *i* dot: a relatively high and somewhat for-

ward positioning (e.g., set A, first line, in *appreciate*; set B, third line up, *in*; and set C, second line down, *night*).

- 5) After the above results were produced by the document examiner, the therapist identified further clinical corroborations as to the singular identity of the writer. Handwriting A was signed by Ruth, the same name as the host personality had. The latter readily reported that she had indeed written some letters to me. Indeed handwriting A matched the handwriting on all the patient's intake forms and diagnostic questionnaires. The contents of script B matched the intrapsychic role and personal style, as well as the negative transference feelings of those displayed by Ruthie, the persecutor-demon alter. Although no personality alter ever assumed responsibility for the written aggressive threats characterized by script B, the contents of the written messages from this handwriting corresponded with processes and issues concurrently dealt with in the on-going therapy of this patient, and thus could not have been written by a different person or at a different time. Handwriting C was signed with the name Hope, the same name used by the patient's protector and observer alter. Messages mailed to the therapist by Hope were in line with that alter's specific role within the system. Her messages and advice were always of timely relevance to issues and dilemmas that were concurrently dealt with in therapy. With regard to the second research question we concluded that the numerous letters written in handwritings A, B, and C were all produced by one and the same author, who had been identified as the DID patient, Ruth.

The Question of Disguise

The diminished fluency and the poor rhythm in all three sets raised questions in the document examiner's mind regarding potential conscious role-playing. However, further study of the questioned documents revealed that each of the three scripts displayed a very high level of internal consistency both within each manuscript and across time. This had been determined through the systematic comparisons of each handwriting's unique slant, pictorial patterns, and distribution of pen pressures along the lines. The handwriting variations within each group has been assessed to be within an expected natural variability. Even though some of the manuscripts were rather long, no signs of fatigue, deterioration in quality or inability to sustain the original unique patterns (problems typically found in disguised handwritings) were here detected. Random horizontal measurements of letters and comparisons of between-word spacings along and across scripts showed the remarkable internal consistency that only single authorship can generate. The different handwritings were alternately presented during the investigated six-month period, frequently representing abrupt changes in the course of a single day. This finding meant that the observed varia-

tions could not have been a result of a natural personality development, nor could it have been accounted for by possible changes in health.

E.S.'s post-hoc analysis of the letters concluded that the questioned manuscripts could not have been possibly written in one sitting, a fact that could have made forgery easier, because they reflected au courant specific themes that had been unfolding in the therapy. This particular fact was further supported by the dates written on the letters as well as by matching postmarks on the envelopes.

CONCLUSION

Handwritings A, B, and C could not have been a product of normal variation or development nor could they have been a result of role-playing, disguise or forgery. These pictorially different handwritings could thus be accepted as genuine and sincere occurrences even though it was also established that they had all been produced by one and the same author.

DISCUSSION

Without reliable and valid criteria for accurate differentiation between authentic DID handwriting samples and possible malingering or forgeries of the phenomenon, potential problems in forensic discrimination between genuine and malingering DID defendants could not be adequately resolved. Coons (1991) reported that between 1977 and 1990, at least 18 accounts of American murder defendants with DID appeared in the scientific literature and the lay press. Several clinicians previously suggested that the prevalence of DID in incarcerated men could be considerably higher than the literature on the subject would have one believe (Bliss & Larson, 1985; Wilbur, 1985). Lewis and Bard (1991) claimed that offenders who had DID and who were amnesic for their crimes were not aware of their psychiatric condition and did not attempt to use their amnesia as an excuse. Nevertheless, between 10% and 70% of violent offenders claim amnesia for their crimes (Schachter, 1986). The need to find auxiliary reliable diagnostic tools under such circumstances is of paramount importance because when faced with severe penalties, criminal defendants could simulate dissociative identity disorder in an attempt to avoid criminal responsibility (Appelbaum & Green, 1994; Behnke, 1997a & b; Braude, 1996). Indeed, such medico-legal concerns have been presented in recent articles (Appelbaum & Greer, 1994; Beahrs, 1994; Saks, 1994). As DID becomes a more familiar nosology, more offenders can become more knowledgeable about the disorder and its relationship to violence. As a result we can expect higher frequencies of sophisticated malingering by defendants.

We hope that this single case-study may encourage further quantifiable and better controlled studies that will reli-

ably compare genuine DID patients and malingers on handwriting variation factors. Nevertheless, we believe that content analysis and document examination of manuscripts with different graphical patterns that either predate the diagnosis of DID in psychotherapy or the retrieval of repressed memories of abuse can be of potential value as an auxiliary diagnostic methodology in legal cases where clinical authenticity is questioned. ■

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