Ideomotor Signaling: From Divining Spiritual Messages to Discerning Subconscious Answers During Hypnosis and Hypnoanalysis, A Historical Perspective

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Abstract

Ideomotor movements account for non-conscious motions of the hand held pendulum and Ouija board planchette that once were attributed to external spirits. Chevreul and Carpenter in the mid-1800s pioneered our scientific understanding of ideomotor movements. The intention or thought is transmitted to the motor cortex at a subconscious level, coordinated by the cerebellum, and sent down spinal nerves to the appropriate muscles, inducing micromovements not visible to the naked eye but amplified by the hand held pendulum or by the slow ratchet-like cumulative movements of a finger or other body part. This ideomotor phenomenon has been utilized during hypnotic trance to provide nonverbal communication of "yes" or "no" or "I don't want to answer" using finger signals or hand held pendulum. LeCron first used this ideomotor form of communication in conjunction with psychosomatic hypnoanalysis. Cheek expanded and more recently Hammond, Walsh, Ewin and others have refined its use.

Keywords: ideomotor, psychosomatic, hypnosis, hypnoanalysis

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A pendulum suspended by a thread, string, or chain and held up by the hand can move in seemingly mysterious ways by amplifying tiny hand movements controlled subconsciously (Brown and Fromm, 1986, p. 87). Holding the pendulum while focusing thought on a specific question or concern can result in the pendulum swinging back and forth or rotating in a circle clockwise or counterclockwise. Meaning has been attributed to the direction of the pendulum swing or rotation as a yes, no, or maybe answer to a question or concern. Before it was understood that tiny hand movements provided input to the swinging or rotation, many believed that the mysterious movements of the pendulum were caused by a spiritual energy and that spiritually correct answers could be divined through the direction of swing or rotation of the pendulum (Chevreul, 1854).

With the age of enlightenment, scientific skepticism began to question what was really going on where supposedly mysterious forces and entities were held to be active. In France, the royal investigative commission headed by Benjamin Franklin conducted experiments on mesmerism and concluded that the effects were due to the imagination, not to mysterious magnetic fluids (Franklin et al 1784/1785). Michel Eugène Chevreul (1786-1889), a French natural scientist and chemist in 1833 reported in a published letter to André Ampere his 1812 investigations of the "occult" pendulum phenomenon and gave it a plausible scientific explanation (Chevreul, 1833). He discovered during his investigation of the supposed spiritual aspects of physical phenomena that when the string of a small pendulum was held by a person's fingers, the pendulum would move without apparent conscious control in the direction that the individual expected. He experimented and found that when he held the pendulum string by his hand and progressively moved an armrest from near his shoulder to near his hand, the swinging of the pendulum successively diminished. He deduced from this observation that it was his own muscles, not some outside spiritual force that was inducing the swinging. He also blindfolded himself and his assistant reported that the pendulum stayed stationary. He deduced from this second observation that somehow he was causing the swinging by watching the pendulum and thinking or intending, which his muscles somehow converted to the motion of the pendulum without his conscious awareness. The pendulum was found to amplify minute ideomotor movements of the fingers that are now understood to occur in reaction to a thought or image at a subconscious or involuntary level (Brown and Fromm, 1986, p. 87). Chevreul was appointed in 1853 by the Académie des Sciences to investigate several spiritualist psychic phenomena of his time such as divining using divining rods and divining by hand held pendulum. He described ideomotor movements with respect to the dousing rod, the pendulum and table-turning in his book (Chevreul, 1854). Chevreul used the principle of expectant attention to account for the movements of dowsing, movements of the exploring pendulum, and table-turning as seen at spiritualist séances. All of these represent ideomotor movements guided by expectancy and subconscious or involuntary response. With our modern understanding, subconscious thoughts and intentions direct the motor cortex, which assisted by the coordinating cerebellum sends motor impulses down the spinal cord to the appropriate muscles, and the brain receives kinesthetic and visual feedback (Häberle 2006). The Chevreul's pendulum named after him has its hand held directions of swing or rotation controlled by these ideomotor movements.

In England, William Benjamin Carpenter (1813-1885), a physician and zoologist, realized when studying the mechanism of thought that much of it seemed to occur outside of conscious awareness in what is now termed the adaptive unconscious. He examined the use of the Ouija or spirit board with a planchette or other small moveable indicator to spell out or give answers to questions and was the first to use the English term "ideomotor" to describe

how muscular movements can produce effects outside of conscious awareness (Carpenter, 1852). This realization dispelled the notion of "divining" based on some action of an external spirit to produce the answers. Moving ahead a century, Erickson (1961) utilized ideomotor hand levitation in hypnosis but as a silent reply signal. It was LeCron (1954) who found that the ideomotor Chevreul pendulum or ideomotor finger movements could be used as silent signals to answer "yes," "no," "I don't know," or "I don't want to say" while a person was in a hypnotic trance, introducing "discerning" of subconscious answers. This discovery will be discussed in greater detail below.

Shifting focus for the moment from ideomotor to hypnosis and hypnoanalysis as used by psychiatrists and psychologists, where the focus is primarily on mental and emotional issues, Freud had studied hypnosis with Charcot in Paris and Bernheim in Nancy. After returning to Vienna, he worked with Breuer on the understanding and treatment of hysteria, including the famous case of Anna O. in their *Studies in Hysteria*. Breuer and Freud (1895) recognized spontaneous hypnotic states occurring in some of these patients (Kline, 1958). Freud later moved away from formal hypnosis to the use of free association in his development of psychoanalysis, but he kept the hypnotist's couch, moving from its side to its head so that the patient could not see him.

Hadfield (1940) was the first to use the term hypnoanalysis when he was treating amnesia from combat associated traumatic experiences in World War I veterans. Lindner (1944) in his book Rebel Without a Cause: the Hypnoanalysis of a Criminal Psychopath, compounded psychoanalysis with hypnosis and described the method that he had developed. Wolberg (1945) also used hypnoanalysis as an adjunct to psychoanalysis to bring previously unconscious impulses and compulsions into conscious awareness and to deal with resistances more quickly. Gindes (1951) also discussed the effectiveness of the hypnoanalytic approach to break through the resistances encountered in the free association during psychoanalysis. Freytag (1959) described a case where hypnoanalysis greatly accelerated the progress of psychoanalysis of a phobic patient by reducing resistance and intellectualization. She also explored body image aspects through hypnoanalysis (Freytag 1961). Arluck (1964) published a case study on hypnoanalysis of a man with World War II traumatic war neurosis. Schneck (1965) with his extensive experience and his review of the literature greatly enhanced the discussion of many aspects of hypnoanalysis. Schneck also mentioned ideomotor hand levitation (Schneck, 1965) as had been discussed by Erickson (Erickson, 1961). Schneck (1965) did not however mention ideomotor signaling. Klemperer (1968) described past ego states emerging during hypnoanalysis and utilized more hypnoanalysis and less free association psychoanalysis for a more rapid approach to therapy. Stein (1972) wrote on hypnotic projection in brief psychotherapy. Sacerdote (1978) discussed induced dreams. Brown and Fromm (1986) expanded the theoretical and practical aspects of hypnoanalysis as modified psychoanalysis in which the patient was in the hypnotic state for 25% to 70% of the treatment time. Edelstien (1981) discussed the clinical use of various hypnoanalysis techniques with case examples. Hall (1989) described hypnoanalysis from a Jungian perspective. Elliott (1991) provided clinical case examples of hypnoanalysis in action. Watkins (1949, 1987, 1992), a major developer of ego state therapy, also expounded on hypnoanalytic insight therapy, projective hypnoanalysis, complex hypnoanalytic techniques, hypnoanalytic ego-state therapy, and existential hypnoanalysis. John Scott (1993, 1996) provided a lengthy history of hypnoanalysis and an extensive discussion of clinical aspects of hypnoanalysis. McColl (1998) published a series of therapy prompt-sheets for hypnoanalysis. Frederick had learned ideomotor signaling from Cheek (see below) and

used ideomotor signaling (McNeal & Frederick, 1993; Frederick & McNeal, 1999) to help identify specific positive ego states that could assist in inner ego strengthening. Walsh (1997) discussed using ideomotor questioning with a "yes" or "no" choice to help resolve negative affect or emotion and included an ideomotor questioning tree. Hammond (1997) studied 247 consecutive patients, of whom 78% were able to achieve ideomotor finger signals that they considered involuntary. He disagreed with using only the "yes" and "no" choices that Walsh offered patients out of concerns for confabulation when forcing a choice. Giving a third choice of "I don't know" or "I don't remember" reduced in the opinion of Hammond and others the forcing of answers that may create false memories through confabulation or being given leading questions. Hammond also cautioned about accepting subconscious answers as being more valid or truthful than conscious answers. Hammond did use ideomotor signaling to confirm resolution of problems and to obtain commitments to facilitate change. Walsh (2003) also used ideomotor questioning for brief substance abuse treatment. Morison (2001, 2002) further advanced the understanding of hypnoanalysis in a two volume work on analytical hypnotherapy, theoretical principles and practical applications. Watts (2005) wrote a clinically oriented book that included hypnoanalysis and his version of archetypal parts therapy with warrior, settler, and nomad and their subtypes.

Shifting focus again from psychiatrists and psychologists to nonpsychiatrist physicians and a couple of exceptional hypnotists, they had a different mindset and their primary concern when utilizing hypnoanalysis was on the body and the effect of emotions and thoughts in producing or aggravating a bodily condition. Medically oriented physicians and hypnotherapists indeed used the term hypnoanalysis but focused on the body and psychosomatic aspects in contrast to the psychiatrists and psychologists listed above who focused on the mind and psychoanalytic aspects. To distinguish it from traditional psychological hypnoanalysis, the author uses the term psychosomatic hypnoanalysis. A hypnotist, Dave Elman (1964) trained many physicians during the 1950s and 1960s to use hypnosis. He used hypnoanalysis to uncover the root emotional factor for a patient with urticaria (Elman, 1964). Elman (1964) discussed applying hypnoanalysis to psychosomatic problems and talked about pinpointing the sensitizing event and the precipitating events. Michael Scott, a dermatologist, in his book Hypnosis in Skin and Allergic Diseases (1960) mentioned using hypnoanalysis for skin disorders (pp. 88-93). He described hypnoanalysis for cases of herpes simplex reactivation (pp. 118-119), rosacea (pp. 121-123), and neurotic excoriations (pp. 132-134). It is the inflammatory skin disorders that are most affected by negative emotional impacts or imprints or conditioning of past events (Greisemer, 1978, Shenefelt, 2000).

LeCron and Bordeaux (1947, p. 220-232) discussed a system of brief hypnoanalysis. In a major advance, Leslie LeCron, a lay hypnotist with a bachelors degree in psychology, was the first to utilize ideomotor uncovering techniques using the Chevreul pendulum and also ideomotor finger movements as answering signals to questions during hypnoanalysis of psychosomatic disorders (LeCron 1954; LeCron 1961). Slow ratcheting ideomotor finger signals appear to be more purely subconscious and have less conscious overlay than other nonverbal signals such as head nodding for "yes" and head shaking for "no" (Häberle, 2006). The fingers seem to be further away from interfering head thoughts than the neck is. Quick brisk finger responses generally represent a conscious rather than a subconscious response. LeCron also organized the hypnoanalytic ideomotor search for psychosomatic sensitizing and precipitating events (LeCron, 1961) under the categories of

(1) Conflicts, (2) Motivations, (3) Identification, (4) Organ Language, (5) Suggestion, (6) Masochism or Self-Punishment and (7) Past Experiences. He collaborated with obstetrician-gynecologist David Cheek. Cheek illustrated ideomotor questioning and subconscious review with a number of medical case examples (Cheek, 1962a, 1962b). Cheek and LeCron (Cheek & LeCron, 1968) expanded the use of the pendulum and especially ideomotor finger signals to answer queries in hypnosis. They felt that these nonverbal techniques permitted accessing preverbal and nonverbal memories that could include events quite early in childhood. Cheek created some controversy by reporting that some of these memories extended back in utero. Others have created even more controversy by reporting memories from "past lives."

The clinical and anecdotal observations with respect to preverbal and nonverbal memories in childhood, in utero, and in "past lives" are not yet supported by empirical research. The ideomotor finger signaling of answers in hypnosis had the advantage of permitting closed eyes, while the pendulum required open eyes to respond to the questions. Cheek and LeCron also elaborated on seven keys to detecting causative factors for psychosomatic problems (Cheek & LeCron, 1968, pp.93-105). (1) Conflict was described as "I want" colliding with "you can't." (2) Motivation dealt with the symptom or problem serving some purpose or secondary gain. (3) Identification related to a similar problem to a problem that a parent, sibling, or other significant person had. (4) Masochism or Self-Punishment was subconsciously self-damaging behavior due to strong guilt feelings. (5) Imprints or Suggestion were single high-impact events, engrams, or fixed ideas similar to Pavlovian conditioning. (6) Organ Language made a figure of speech into a literal psychosomatic problem, such as "I felt stabbed in the back" becoming a chronic backache. (7) Past Experiences related to emotionally charged imprints or traumatic events. Suggestions in hypnosis that reframed the initiating, sensitizing, or triggering events often resulted in improvement or resolution of the psychosomatic symptoms or disorder. The process is further described and psychoneuroimmunologic pathomechanisms are explained in Rossi and Cheek (1988). Subsequent authors have rearranged the 7 keys slightly for mnemonic purposes as COMPISS (Ewin & Eimer 2006) and COMPASS (Shenefelt 2010) as described further below.

Cheek wrote a revised, expanded and renamed edition that included ideomotor in its title (Cheek, 1994) in which he added considerable clinical case material. Areas of application included sexual dysfunction, preterm labor, chronic pain, critically ill patients, surgical emergencies, exploring dream ideations, and exploring symptoms associated with hearing statements interpreted as negative while under general anesthesia. Cheek had first reported the unconscious perception of meaningful sounds under general anesthesia (Cheek, 1959) and this was confirmed by Levinson through a case report (1965) and controlled study (1990). Bennett (1990) espoused a theory of unconscious hearing. They are further summarized by Brown, Scheflin & Hammond (1998). These studies corroborate the ability of ideomotor signaling to elicit clearly subconscious memories. Cheek (1994) also expressed the law that pessimism overrides optimism during times of distress or threat. He noted that animal research on imprints showed that epinephrine both imprinted the memory strongly and produced amnesia for it, correlating with and explaining the findings in humans of amnesia on the conscious level for traumatically imprinted memories. Cheek used the pendulum only for pre-hypnosis demonstration of ideomotor activity to skeptical patients, preferring the "yes," "no," and "I don't want to answer" finger signals in clinical work to permit closed eyes while answering (Cheek, 1994, p.33). With the eyes closed, a major source of sensory

input and potential distraction is removed. He eliminated the "I don't know" finger signal because too many of his patients used it to avoid answering. It is important to retain the "I don't know" finger signal in hypnotic legal work where leading questions must be carefully avoided. Hammond in the preface to Ewin and Eimer (2006, p. viii) noted that forcing a choice of answer results in increased confabulation. He also reported in that preface (Ewin & Eimer, 2006) a case of a woman with anorgasmia who also had frequent recurrent vaginitis. After phone consultation with Dr. Cheek, hypnoanalysis with ideomotor signaling revealed that the vaginitis was an unconscious punishment for guilt about prior unmarried sexual involvement. The vaginitis resolved and remained clear except for one or two episodes in 15 years of followup. Hammond (1998) also included in his practical clinical guide models of types of questions that can be asked and suggestions for dealing with resistance with ideomotor signaling.

Barnett noted some problems in performance and interpretation of ideomotor finger responses (Barnett, 1980). While in the majority of patients the finger technique is easily established and interpreted, resistance may produce slight or no finger response, or more than one finger may lift. He discussed this issue further in his book (Barnett, 1989). He also used Transactional Analysis, relating the conscious state to the conscious part of the Adult ego state and the subconscious ideomotor finger signals to the parent ego state, where resistance usually resides, or to the even deeper subconscious Child ego state. He mentioned self-excoriating skin disorders with no organic cause as an example of self-punishment for guilt, reflecting a Parent/Child ego state conflict (Barnett, 1989, p. 104).

Ewin reported a series of 41 cases of warts resistant to standard wart therapies including hypnotic suggestion for wart resolution, where he was able to achieve 33 cures using hypnoanalysis with ideomotor signaling (Ewin, 1992). Ewin and Eimer expanded and standardized the process of ideomotor signaling for psychosomatic hypnoanalysis (Ewin & Eimer, 2006). A standardized intake questionnaire was included along with hypnosis scripts (Ewin & Eimer, 2006) and instructions to the patient for specific finger ideomotor signaling (Ewin & Eimer, 2006). They used the mnemonic C.O.M.P.I.S.S. (Ewin & Eimer, 2006) for LeCron's seven keys to detecting causative factors: Conflict, Organ language, Motivation, Past experiences, Identification, Self-punishment, and Suggestion as outlined in the ideomotor analysis worksheet (Ewin & Eimer, 2006, pp.255-263). Detection of significant initiating, sensitizing, and/or precipitating factors were indicated by ideomotor signaling and brought to consciousness by imaging the memories and verbalizing them. The authors asserted that with ideomotor signals, preverbal memories could be detected and subsequently brought to conscious memory.

Each of the seven C.O.M.P.I.S.S. factors should be checked to assure diagnostic completeness, as more than one factor can be involved. As a rough rule of thumb, if only one or two categories are involved and one initiating event can be recalled and emotionally neutralized, substantial reduction or resolution of the problem can usually occur in one to three treatment sessions. Therapeutic reframing options were suggested in hypnosis for uprooting or neutralizing emotionally charged factors uncovered by the ideomotor signals. They gave case examples of resolution of a plantar wart (Ewin & Eimer, 2006, pp. 73-74), neurodermititis (pp. 77-79), penile warts (pp. 81-82), recurrent herpes simplex labialis (pp. 86-89), urticaria (pp. 89-92), and a one visit cure of hypersensitivity to touch in a scar (pp.186-201). Dr. Ewin has stated that almost anything you can treat with cortisone or antihistamine will probably respond to hypnosis (personal communication, 19). The author (Shenefelt, 2007) has also reported a case of erythema nodosum that was recalcitrant to treatment for

nine years. She was presented as a demonstration case with Dr. Ewin and during the C.O.M.P.I.S.S ideomotor review in trance, her fingers answered "no" to Conflict, "yes" each to Organ Language, Motivation, Past experience, Identification, and Self-punishment, and "I'm not ready to answer that yet" to Suggestion. Dr. Ewin offered reframing suggestions for each of the "yes" areas. She was seen by the author 5 days later and had started to improve. She was referred to a psychotherapist but failed to comply with the referral. By 10 weeks after the demonstration her erythema nodosum lesions had fully cleared and stayed resolved for full year.

In dermatology, and in many other fields of medicine, it is highly desirable to be able to sort out physical disease aspects from psychosomatic overlay aspects of skin or other disorders. The author has used a modification of the LeCron and Cheek Seven Keys slightly modified from the Ewin and Eimer C.O.M.P.I.S.S to the mnemonic C.O.M.P.A.S.S. representing: (1) Conflict, (2) Organ language, (3) Motivation, (4) Past experiences, (5) Active identification, (6) Self-punishment, and (7) Suggestion (Shenefelt, 2010). This C.O.M.P.A.S.S. helps guide the hypnoanalysis through the uncharted waters of the patient's psychosomatic overlay onto the skin disorder. After going through a focused intake questionnaire similar to that of Ewin and Eimer but specific for skin disorders, the author induces hypnosis in the patient and then goes through each of the C.O.M.P.A.S.S points one at a time with ideomotor finger signaling for "yes," "no," or "I don't want to answer". If all of the ideomotor answers are "no" and the answers appear to be reliable, then it is unlikely that there is a significant psychosomatic overlay on the skin disorder. If one or two or three of the answers are "yes," then reframing suggestions may reduce or eliminate the psychosomatic addition to the skin disorder. If four or more of the answers are "yes," then the psychosomatic issues are likely of a complexity that would benefit from referral to an appropriate psychotherapist. The clinical and anecdotal observations with respect to correlation between the number of positive responses and the need for referral to a psychotherapist are not yet supported by empirical research. Unfortunately, as exemplified by the author's patient mentioned above (Shenefelt, 2007), the patient may fail to comply with the referral. Despite that, he or she may still obtain substantial benefit following the hypnoanalysis and reframing.

Iglesias (2005) reported three failures of psychogenic neurodermatitis to respond to direct suggestion under hypnosis followed by successful intervention with hypnoanalysis. Ideomotor signaling of answers to analytic questions, regression to onset of the condition, and reframing was carried out in each of the three cases with subsequent confinement of the neurodermatitis to a very limited area or resolution of the neurodermatitis. The author has reported one similar case (Shenefelt, 2010) of a 32 year old white female patient who presented with neurotic excoriations on her nose and glabellum. She was given cognitive-behavioral instructions to become aware of the urge to pick, keep her elbows straight, and clench her fists until the urge had passed, but it failed to stop the picking. She scored 4 of 10 on the Hypnotic Induction Profile and had direct suggestions to think and visualize a "scar" as her hand approached her face. She was told that natural imperfections are more beautiful than artificial perfection. When she was seen two weeks later, her glabellar excoriation was almost healed and her nasal excoriation was still crusted but not picked open. She still had the urge to pick, however, so further focused history questions were asked followed by hypnoanalysis using the C.O.M.P.A.S.S format. For Conflict she regressed to about 3 to 4 years old and remembered being scared about her "bad" part as her parents were arguing with each other about her behavior. For Organ language, she regressed to about 10-15 years old and remembered her mother telling her "don't cut off your nose to spite your face." With respect to Motivation, she said that at age 10-15 years old the picking feels good. As a Past

experience at age 10-15 years old, her mother taught her to squeeze blackheads out of her nose, which her father opposed and chastised her mother for teaching her. With respect to Active identification at age 10-15 years old, her mother repeatedly told her that her mother thought her own nose was ugly and that the patient had a cute button nose. As to Selfpunishment at age 10 to 15 years old, the patient felt guilty about undisclosed behaviors and self-punished with picking. She was not aware of any Suggestion. The author offered her reframing suggestions for each of the six positive elements of the C.O.M.P.A.S.S. and suggested that she discuss them with her therapist. On a subsequent visit, her glabellar forehead and nose continued to heal and she felt little urge to pick and was able to control the urge without picking.

Discussion

This review of ideomotor signaling and hypnoanalysis illustrates the value of using hypnosis with ideomotor signaling to screen for psychosomatic factors related to the triggering or exacerbation of physical disorders. When screening the patient, if the focused history and all seven C.O.M.P.A.S.S. factors are negative, it is possible with reasonable certainty to rule out a significant psychosomatic component to the disorder. No answer can be trusted as absolutely "true" without external verification, however. If only one, two, or perhaps three factors, are positive and they relate to specific sensitizing, initiating or precipitating events, treatment with positive reframing suggestions may be sufficient to neutralize the associated negative emotions and alleviate or resolve the psychosomatic component of the disorder. As a general rule of thumb, if more than three factors are positive, the degree of complexity warrants referral to an appropriate psychotherapist for treatment in addition to giving positive reframing suggestions. However, the clinical and anecdotal observations with respect to correlation between the number of positive responses and the need for referral to a psychotherapist are not yet supported by empirical research.

Since the focused history followed by hypnoanalysis with ideomotor signaling reviewing the seven C.O.M.P.A.S.S. factors typically takes less than an hour, it is a very productive and efficient screening and treatment method for significant psychosomatic components of physical disorders. In some cases this can cause significant improvement in the disorder when other methods had not been effective. The medical form of hypnoanalysis with ideomotor signaling is far less complex to learn than the psychological form with psychoanalysis using hypnosis. For a medical practitioner who has already learned to use hypnosis, adding hypnoanalysis with ideomotor signaling can substantially enhance diagnostic and treatment effectiveness for recalcitrant or otherwise intractable cases.

Some psychotherapists such as Walsh (1997, 2003), Hammond (1997), and Frederick and McNeal (1999) have also begun to adopt ideomotor finger signaling in hypnoanalysis as an efficient means of obtaining answers from the subconscious in the mental health realm, where the focus is on emotions, mind, and cognitions and beliefs. Hammond's (1997) cautions about not forcing confabulated false memories or using leading questions or accepting subconscious responses as being more "true" than conscious responses without some form of external verifications should be kept in mind. Ideomotor signaling does provide another tool for psychological hypnoanalysis that can be used as a silent signal response to queries without lightening the level of trance or engaging the critical judgments that may be associated with speech and alert thought processes. Future funded scientific research would be ideal to expand and solidify our knowledge base. There is considerable opportunity to further explore and enhance the use of ideomotor signaling in the fields of psychiatry and psychology.

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