

AN UNUSUAL AUDIO-MOTOR SYNESTHESIA IN AN ADOLESCENT
Significance of this Phenomenon in Psychoanalytic Therapy

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It is proposed here to report a previously undescribed type of audio-motor synesthesia, on the basis of data obtained 30-odd years ago, and re-checked after a lapse of 25 years. Since these data were secured under conditions which were not "scientifically controlled," the only positive confirmation of them is that the subject remembered statements he made originally.

The Initial Data

When the writer was an adolescent much interested in intellectual and artistic matters but especially in music, he had several friends of his own age who shared these interests and with whom he engaged in lengthy discussions about these topics. One day the writer read in a technical treatise on music that, when Liszt directed an orchestra, he frequently admonished the musicians to play "more green" or "more red," and so on. The book added that some persons apparently have sound-color synesthesias, and that the Russian composer Scriabin had even written a composition for an orchestra containing a "color-organ" providing color effects—apparently by means of a "scale" "tuned" in terms of wave-lengths.

The writer mentioned this to one of his friends "X"—who was then about 15 or 16 years old—who promptly remarked that he had certain motor associations to the sounds of names. He explained that names, that is, words which have no inherent meaning to persons unfamiliar with their original derivation,* seemed to suggest to him certain kinds of body-movements. He specified that these associations were so clear-cut that sometimes the association amounted almost to an imagined experience of movement, that is, to a kind of virtual movement.** The boy also remarked that the motions associated with specific names never changed.

The writer and the other young men present were very much

*For example, it is doubtful whether even a Greek scholar, on hearing the name "George" in an ordinary conversation, is particularly aware of the fact that it means "tiller of the soil."

**An interesting example of imagined movement, resulting from a temporary paresthesia induced by codeine, was reported earlier by the writer.¹

interested, and numerous questions were asked of X, the boy who reported this experience. In the course of talks the following additional data emerged: The subject could, on the spur of the moment, evoke motor associations to names to which, to the best of his recollection, he had had no previous associations. On being offered certain names for consideration—both given names and family names—he would think for a fraction of a second, and then actually perform the movement which the name had suggested to him. Once or twice, the same name was repeated at intervals, and the young men present readily agreed that the movement made initially was repeated accurately when the name itself was repeated perhaps half an hour later. Since a large number of names was mentioned, it is impossible to suppose that X remembered in an objective manner each meaningless minor movement which he had performed half an hour earlier.

The writer who, like many intellectually inclined adolescents, was at that time interested in everything and thrilled by every new phenomenon or bit of knowledge that came his way, took quite a few notes, which he later on copied for future reference. He also discussed this matter on several other occasions with X, until they both lost interest.

About a year after the first discussion, X and the writer more or less drifted apart. They saw each other very seldom between 1925 and 1932, and did not meet at all after July 1932 at the very latest. They did not correspond, except for a very brief period after World War II, when both were rather anxious about their families, and conveyed to each other such news as they had received from home. This correspondence was examined recently, and it was found that not even the remotest reference was made in it to the matter of synesthesias.

In the course of his own didactic analysis, the writer had occasion to consult certain of his old notes, to verify some detail which had no connection either with the problem of synesthesia, or with X. While scanning his old papers, he came across the notations about X's audio-motor synesthesias, which in view of his professional involvement with psychological matters, interested him sufficiently to induce him to try to get in touch with X—of whom he had again lost sight—to test his own recollections.

He obtained X's current address and sent him a letter, reminding him of the synesthesias, and submitting a series of names

whose motor associations he had recorded almost three decades ago. Needless to say, the motions themselves were not even hinted at in this letter. The letter simply stated that X no doubt recalled the discussions which they had had on this subject, and asked him to record once more the movements which he associated with a list of names in the letter. Nothing further was said in the letter of inquiry.

In his reply, X expressed amazement that the writer should still remember this matter, which X himself had all but forgotten, or, at best, only remembered once in a very great while, as something so remote as to seem almost alien. He said he still remembered the movements, but no longer had the sense of imagined "potential movement" when trying to concentrate upon a name. "I can no longer feel the imagined movement in my body." He added that, on his own initiative, he also tried to have motor associations to the various *new* proper names—personal and geographical—which occurred in the writer's letter, in order to test whether he was still endowed with the capacity of associating movement to sounds. Thus, he tried to associate to the following "new" names: Topeka, Kansas, Jones, [*Rue de*] *Condé*,—and some others. He found that he could just barely "associate" to them: "It is almost an act of will, and I *feel* no potential movement." The one exception was "Jones" because of its written (but not phonetic) resemblance to the Hungarian "Jóska" (a diminutive of József, or Joseph.)* The other quasi-exception mentioned—"Condé"—was kinesthetically more "real," probably because X had had a personal experience with the "*Rue de Condé*" while a student in Paris.**

The names listed in the writer's letter, and also in his old notes, were taken up one by one in X's reply. The movements described agreed *in every single detail, without any exception or deviation whatsoever*, with those recorded in the diary.

Associations

Since X (who, though he did not become a professional intellectual, became a cultured businessman) knew that the writer had

*In Hungarian Jóska is pronounced Yoshka(w), with a long and accented first syllable. The sound written above as "a(w)" is pronounced as in the English word "raw," but is *short* and is not accented. It differs in sound from "Jones," with which it shares three letters, two of which "J" and "s," have different sounds in English.

**It was through a reference to their student days in Paris that the "*Rue de Condé*" came to be mentioned in the writer's letter.

training in psychoanalysis, he spontaneously added some of his current associations to the various names. How valid these associations are, in respect to understanding the original unconscious motivation of the synesthesias, as they were experienced decades ago, probably cannot be determined at this late date. It is possible that they do shed some light upon this matter, since one or two of the names listed are rather uncommon, and not of a kind an émigré Hungarian is likely to hear abroad. One of these names is that of a fellow high school student, of whom both X and the writer had lost sight a good many years ago. Some additional comments are added by the writer. The names themselves are reproduced in the order in which they appear both in the notes and in the letter.

THE DATA

Phonetics: Here are indicated only the pronunciations of Hungarian vowels and paired consonants which actually occur in this article, and whose pronunciations differ from their English pronunciations.

Vowels: a=raw, but short (French: tant); á=part; e=French ai, as in lait; é=make; o=short o (French: pot); ó=door; ö=French eu, as in feu; ő=German ö (long) as in böse.

Consonants: cs=chew; cz=German z, as in Zug; j=ly=y as in you.

Accent or Stress: Strong and always on first syllable.

Sample Names Reported in 1924 and Re-Tested in 1952

Jenő

A single movement of the foot, not involving the leg, as when depressing the pedal of a piano, or stepping on someone's toe.

Associations: They always said I used the pedal too much, alleging I did it to cover up mistakes. That was not so. I just liked the pedal effect. The only other pedal movement I can think of is that of an old-fashioned sewing machine. We had a seamstress named Katicza.

Comment: "Jenő" is the name of the writer's father, who did not like X very much, saying his manners were poor. Perhaps X wished to step on his toes.

Note: Jenő is apparently a purely Hungarian name, though in Hungary it is held to be the equivalent of "Eugene," and is so translated. (Gyula is another such artificial "equivalent" for

Julius, though Gyula in Old Hungarian means a kind of shaman or priest officiating at burnt sacrifices.)

Katicza

This is a ticking up-and-down movement, but not of the body. It is associated with the ticking movement of the needle in the sewing machine... and we had a seamstress named Katicza.

Associations: Even if there had been no sewing machine and no seamstress, I still feel that Katicza would have been a ticking up-and-down movement name. It is the only name to which I have both motor and sound associations. The sewing machine used to fascinate me. I think I must have had some sexual associations to the ticking up-and-down movement, because I recall adolescent fantasies of petting with Katicza, who was far from pretty.

Comment: It should be noticed that there is no association to the pedal movement of the seamstress. The imagined movement takes place *outside* the body.

Note: Katicza is a diminutive of Katalin (Catherine.) It is traditionally a "cute" name in Hungary, as "Susie" is a "cute" name in English. The writer also knew Katicza, who was far from "cute."

Jóska

A spoon is inserted in the mouth—it has to be a large silver soup spoon—and the head is forced back, by tilting the spoon toward the vertical position. There is no sense of swallowing.

Associations: Jóska's uncle was our family physician, and he did use large silver soup spoons to give us medicine. For a moment I had the puzzling feeling that perhaps the spoon was inserted with its convex surface upward. Then I realized that the handle of the spoon was sometimes used as a tongue depressor, when Jóska's doctor uncle looked at my throat.

Note: The writer is able to verify this use of silver spoons, since Jóska's uncle was, for a while, also the family physician of the writer's family. Jóska was one of the group. (Jóska means Joe.)

József

Two separate motions are associated with this name. One is a movement like tightening a bow tie. The other is a slight blow-

ing out of the cheeks, and a bulging, snoutlike, protrusion of the lips.

Associations: When I was very young, my parents made me wear a big, stiff bow tie, nearly three inches wide. I hated it. It seemed babyish and girlish. Later on I was one of the few boys who wore regular bow ties. The grimace has a very clear-cut origin. Jóska's older sister insisted on calling him by his full name, József. She had a slight tendency to speak as though her mouth were full of mush. It sounded almost as though she were saying "Józsaff," or Józsaphph."

Comment: Jóska was not too well liked. He was something of an arrogant esthete. His sister was considered slightly odd. She may have been mildly schizoid.

Marcsa

You put your hand—the fingers in the piano-playing position, but with the wrist elevated, as though you had just finished playing a chord—upon a small-plate-sized soft, pinkish-white surface; the fingertips penetrate almost to the depth of the first phalanx, but do not break the surface. Then you twist the whole clockwise, about 45 degrees.

Associations: The first thing that came to my mind was a mass of dough, the kind they used to make bread or strudel with. Then I realized the surface was smooth, and continuous. It could not be penetrated. The next idea that occurred to me was a breast. I recall playing at that time with the bare breasts of a pretty parlornaid. I even remember how you came to ask me about this name. When your sister was born, about 10 years earlier, you insisted that she be called Mária or Sonia. Your parents talked you out of "Mária," by saying that it would be awful if she came to be known as "Maresa."

Comment: Note the oral element in bread-dough, strudel dough and breast. "Marcsa" is a definitely peasant-type diminutive of Maria. An urban girl would be known perhaps as "Mariska." Even the form "Maris" has rural connotations, but does not sound as coarse and sloppy to Hungarian ears as "Maresa." The latter is a servant-girl name *par excellence*, though occasionally a lady

belonging to the earthy Hungarian gentry or nobility would deliberately choose this non-genteel diminutive of Mária for herself.*

Borcsa

The same general movement is implicit in *Borcsa* as in *Maresa*, except that the object twisted is a—perhaps puffy—face.

Associations: There was a girl named *Borcsa* or *Boriska*—I do not know which—who belonged to our social class, but with whom, for some reason, few of us had any contact. For people of that class, her family lived relatively far from the center of the town, where the “better class” lived.

Comment: *Borcsa* is the servant-girl type diminutive of *Borbála* (*Barbara*), of which *Boriska* is the urban diminutive. The associations stress that this girl’s family lived in a part of the town not inhabited by the professional and business class, though they could have lived elsewhere.

Borbála

Using the edge of the right hand, one performs motions along the cheeks, as though one were shaving with a straight razor.

Association: In Hungarian the barber is called: *borbély*.

Comment: This motor association is apparently related to the association to the motions of the sewing machine needle, mentioned in the case of *Katicza*.

Sostarics

The motions of the hairclipper on the top of the head.

Association: Mr. *Sostarics* was the barber of the middle class. I hated it when, every summer, my parents forced me to have my hair clipped as though I were still a small boy.

Comment: The motor association is related to the *Katicza* and *Borbála* associations.

Margit

A starched collar, already buttoned to the back of the shirt’s neck, is pulled forward on both sides. The ends of the collar are held firmly but not tightly in the hands.

Associations: The starched, buttoned-on, collar is really im-

*This deliberate posing as something one is not, in connection with names, is not very rare in the aristocracy. Protestant Hungarian noblemen, as anti-Semitic as the rest, sometimes had Old Testament names of a definitely Jewish character: Abraham, Samuel, and so on. During the Dreyfus affair it was fashionable among anti-Dreyfus French aristocrats to say: “We are calling this evening on the Lévis—meaning the ducal family of Lévis-Mirepoix, who half seriously profess to be descended from King David.”

aginary—only the motion-pattern is real. And I should have added that the sewing machine needle in the "Katicza" association, the silver spoon in the "Jóska," the bow tie in the "József," and the hairclipper in the "Sostarics" are all "not really there." It is an "as if" feeling. But the dough-breast of Marcsa, the face of Boreca, the soaped cheek of Borbála are "there," or *feel* as if they were there. The only "Margit" I really knew was your mother. I heard of St. Margit Island in Budapest. I don't like the name. Come to think of it, I like few of these names.

Comment: It is conceivable that X saw, in the writer's parental home, an old photograph of the writer's mother in which, dressed in a 1909 style high-collared dress, she was gazing at the writer, who was one year old in that picture. The picture stood in a conspicuous place.

Böske

A movement like vigorously pushing with the tip of one's fingers a handkerchief into the cuff of the left sleeve, the way English officers do.

Associations: The maid with whose breasts I played was called Böske. I remember developing after World War I an idealization of the British—especially of the British Navy. Two incidents come to my mind. When I was 11, my father tried to persuade me to let him buy me shirts requiring cuff links. I did not like the idea. When he smilingly commented that British officers wore such shirts, I was so embarrassed, I hid under the table. In fact, I literally dived under it. The other thing I recall is laboriously printing for myself, by hand, a visiting card which read: Sir X. . . Y., R.N., Captain of H.M.S. "Britannia." I never showed it to anyone.

Comment: Böske is also a semi-peasant diminutive of Elizabeth. The sexual connotations of the motor association are suggestive, since he played with this girl's breasts. The relation "young master" and "parlormaid" was often a sexual one in Hungary, and the maids, far from considering this an imposition, almost took pride in it. The "British officer" association also underscores this element, especially since one incident specifically involves the cuffs of shirts. The cuff links *may* represent testicles, though this is pure inference.

Biller

You press down with your finger, like depressing a key of the

piano. Something long and slender, like the piano mechanism, trips.

Associations: You recall that Irén Biller was a famous Hungarian actress—the most popular one next to Sári Fedák.

Comment: The writer recalls telling X a pun about Irén Biller, which had a distinctly sexual implication. This incident stuck in the writer's mind, because it was the first off-color story his mother ever told him. X and the writer liked to open pianos, and watch the movements of the mechanism. Sexual implications seem probable, in connection with the motion of long, slender levers inside a big box.

Fedák

The hand is held palm downward, and is then thrust sidewise some six inches. At the same time there is the feeling of a sudden downward motion of the hand as well—as if patting someone on the head. Associations to Sári Fedák's given name also intrude. *Sári* means this: The two sides of the brim of a picture hat are bent down toward the neck.

Associations: An ugly name. I never liked this actress' looks either. The whole name has a pertly vulgar quality, like a vulgarly saucy, short-skirted French maid in a stupid non-French comedy.

Comment: The hostility is unusually apparent also in the sidewise thrust of the hand.

Károly

I stand upright. My left leg is extended sidewise from the start. I pull it toward me in such a manner that only the inner edge of the shoe-sole scrapes the ground.

Associations: I can't think of anyone called Károly. There was a boy named Karesi (diminutive of Károly). His name evokes the same movement, but *also* a simultaneous compressing of someone's waist from both sides, with my hands on that person's waist. The only Károly I can think of was the last King of Hungary. You told me you had a disagreement with your father about King Károly's burial. The foot movement brings to my mind the German word "*verscharren*," which to me evokes burial by *scraping* earth on the coffin or body.

Comment: A pun may be involved in regard to Karesi, displaced from Károly: To embrace, to put one's arm(s) around someone (Hungarian: *átkarolni*).

Ilona

Some kind of hand motion near the lobe of the ear.

Associations: It makes me think of some girl's pierced ear lobe. But the hand movement is not a piercing one—rather a kind of stroking, *without* contact.

Comment: X appears to have forgotten that when they pierced the ears of the writer's sister—named Ilona—he was disgusted with the barbarity of the practice and spoke of it angrily to his friends.

Csibi

Pinching the back of a little girl's neck—rather like lifting a cat by the scruff of its neck.

Associations: You brought this name up, as I recall. It was the pet-name of a girl who was then about six or seven years old. Csibi makes me think of—and is probably derived from—"csibe," meaning a very young chicken.

Comment: Chicken has *no* sexual connotation in Hungarian; it has in English.

Iván

I pinch someone's belly between my thumb and fingers. No—it is as though I pinched my own belly. Even that is not correct: It is as though I had *two right hands* and pinched both another person's and my own belly. (The old notes record a hesitancy of the movement.)

Associations: It is a Russian name. Or Slavic. You remember the man called Iván in our home town. He was perhaps the handsomest man I had ever seen and had been a hero in World War I. I envied his success with girls. And he was brilliant on top of it.

Comment: X appears to have forgotten that he knew about Iván chiefly through the writer who, wishing to learn more mathematics than he was taught in school, took mathematics lessons from this future college professor.

Lipót

Pulling with thumb and forefinger at the protruding lower lip of a man or my own lip.

Association: It is an ugly name in Hungarian; uglier even than its German original, Leopold. I did not know at that time anyone by that name. How did it ever come up?

Comment: It was mentioned by the writer, whose (deceased) grandfather was so named.

COMMENT AND DISCUSSION

The type of motor synesthesia reported in the preceding pages seems very unusual. It is striking that in some cases, like that of Iván, X confuses his own body with that of another person, who is handsome and enviable. In the case of Katicza the movement takes place *outside* the body. In some cases the body of the subject alone is involved; in other cases there is an external body that is being manipulated in a specific way. In the case of Marcsa the movement is reminiscent of an actual gesture involving Böske.

It would be gratuitous and cobwebby to speculate in psychoanalytic terms about the precise unconscious meaning of these movements, to which no associations were obtained at the time they were observed. Their interest for the psychoanalyst lies in the fact that they suggest the urgent need of paying far more attention than is usually given to sensations of movement experienced by patients during the analytic hour. Thus, the uncertainty as to whether the subject pinches his own belly or that of another person—or both, with “two right hands”—is reminiscent of what one sometimes observes in schizoid patients: an uncertainty of body-boundaries and a marked tendency to avoid commitment as to the inclusion or exclusion within the body image of certain critically important organs.

For one example, a borderline patient refused, for nearly 18 months, to use the possessive pronoun “my” in connection with his head and with his penis, which, in his unconscious, were really one and the same organ.³

The feeling of movement outside the body—like the ticking of the sewing machine’s needle in “Katicza”—probably belongs to the same order of experiences.

Noteworthy are the many examples of passively experienced movement: hair being clipped, spoon being inserted in the mouth and forcing the head into a new position, cheek being shaved,

and so on. A careful analysis of psychologically early dreams sometimes reveals clear-cut indications of passively experienced movement.⁴

For a second example, a depressive, apathetic and somewhat infantile young man had some dreams in which, though he seemed adult, he experienced quite clearly passive movement, such as a child carried by his mother may experience. This was particularly clear in a dream involving a ride in an elevator. It is noteworthy in this context that, even though he had many dreams in which he *said* that he was *driving* a car, a careful scrutiny of the *actually reported* manifest content of the dream showed only that he was *sitting* in the driver's seat, holding the steering wheel. The actual *activity* of driving was almost never a part of the dream content. Otherwise stated, his position in the driver's seat tended to disguise the fact that he was actually *not* doing any real "driving," but was being passively transported along by the car.⁵ Other examples of this type of passive transportation masquerading as "driving" were also observed in certain very infantile dreams of other analysands. Another type of passive motion-experience is, of course, the well-known "recall of primal scene" sensation of oscillation, already noted by Fenichel⁶ and discussed by the present writer in connection with the peculiarities of night-vision.⁷

The principal purpose of this paper is to alert the practising analyst to the phenomenon of motor synesthesias, which can sometimes be observed also in the course of the analytic hour, and which probably—as the clinical examples indicate—are one very basic and early type of "association" to the manifest material produced by the analysand. Such motor and other bodily sensations are not often mentioned and even when mentioned, their real meaning does not become apparent unless one is keenly aware of their importance and significance. Not until the letter containing the material given in this paper reached the present writer, did he become personally aware of the heavily disguised fact that a dream in which the dreamer *seems* to be driving a car is often really a dream of being passively transported. Motor sensations usually pertain to very early experiences and modes of perceiving, experiencing and reacting, and may, therefore, give the *erroneous* impression that the patient is on the verge of a psychotic

break. In reality, this type of experiencing tends to remain infantile chiefly because it is useless in daily life and is, therefore, not subjected to maturation through the pressure of adult experiences.

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