

## Un approfondimento su...

# Psychodynamic interpretation of linguistic findings in patients with epileptic and psychogenic non-epileptic seizures: the role of metaphors

## *Interpretazione psicodinamica dei contenuti linguistici in pazienti con crisi epilettiche e pazienti con crisi psicogene non epilettiche: il ruolo delle metafore*

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**SUMMARY.** This work points out the main differences in the semantic expressions used by patients with psychogenic non-epileptic seizures (PNES) and epileptic seizures (ES). In reference to the body as a phenomenological entity, in ES the concept of the body-object prevails while in PNES the body, with all its life attributes, predominates. In description of seizures and in similitudes and metaphors used, ES patients focus on the description of the attack, trying to close the "gap" with a big effort, while patients with PNES concentrate on the context and on the presence of bystanders. Patients with PNES are unable to describe their own attack, since this it is not at the core of their distress, but rather the manifestation of something else, which is hiding the extreme anguish associated with experiences of the past that cannot be revealed (expressed). In the case of ES, instead, the ability to talk and the willingness to elaborate on the emotions become useful tools for facing the disease, an entity perhaps unsurmountable but at least manageable, to the benefit of everyone. In general, we can say that the experience of a disease (real or symbolic) deserves constant attention because it gives us the opportunity not only to probe the depth of the emotional experiences but also the psychic structure of the individual in front of us. A cure would not be a cure without considering such fundamental elements. It would become a sterile exercise of prescribing medications without paying attention to the person, which is the best way of preserving dignity in a state of illness.

**KEY WORDS:** pseudoseizures, epilepsy, semantics, differential diagnosis, metaphors.

**RIASSUNTO.** Questo lavoro sottolinea le principali differenze nelle espressioni semantiche usate dai pazienti con crisi psicogene non epilettiche (CPNE) e crisi epilettiche (CE). Per quanto concerne il corpo inteso come un'entità fenomenologica, nelle CE prevale il concetto di corpo-oggetto mentre nelle CPNE predomina il corpo con tutti i suoi attributi di vita. Nella descrizione delle crisi e nelle similitudini e metafore utilizzate, i pazienti con CE focalizzano la loro descrizione sull'attacco, cercando di chiudere il "gap" con un grande sforzo, mentre i pazienti con CPNE si concentrano sul contesto delle crisi e sulla presenza di spettatori. I pazienti con CPNE non sono in grado di descrivere il loro attacco, dal momento che non è il *core* del loro disagio, ma piuttosto la manifestazione di qualcosa d'altro, che sta nascondendo l'estrema angoscia associata con le esperienze del passato, che non possono essere rivelate (espresse). Nel caso delle CE, al contrario, l'abilità di parlare e la volontà di elaborare le emozioni diventano strumenti utili per fronteggiare la malattia, un'entità forse insormontabile ma almeno affrontabile, per il bene di tutti. In generale, possiamo affermare che l'esperienza di malattia (reale o simbolica) merita costante attenzione poiché ci dà l'opportunità non solo di provare la profondità delle esperienze emozionali, ma anche la struttura psichica dell'individuo davanti a noi. Una cura non sarebbe infatti una cura senza considerare elementi così fondamentali. Il nostro diventerebbe uno sterile esercizio di prescrizione di farmaci se non prestassimo la giusta attenzione alla persona, che è il miglior modo di preservare la dignità in una condizione di malattia.

**PAROLE CHIAVE:** pseudocrisi, epilessia, semantica, diagnosi differenziale, metafore.

## INTRODUCTION

Psychogenic non-epileptic seizures (PNES) are paroxysmal episodes of compromised self-control with a wide range of motor, sensory, and psychological manifestations that resemble those of epileptic seizures (ES), but are not associated with paroxysmal discharges at EEG<sup>1</sup>. Recently, the International League Against Epilepsy (ILAE) has proposed a stepwise approach for the diagnosis of PNES<sup>2</sup>, with four categories of certainty (possible, probable, clinically established and documented), based on common scenarios and the combination of the data, reflective of clinical practice. These two types of experiences, despite the same phenotype, are the expression of two completely different phenomena, from an etiopathogenetic perspective. In particular, PNES, like other physical manifestations of psychogenic origin, are related to one of the most typical manifestations of hysterical disorders<sup>3</sup>, which can manifest themselves within a framework of conversion or disassociation. The essence of a hysteric symptom is the fact that it is something always referred to as something else (from the Greek *simpipto*: to occur together), in the sense that “unconscious conflicts” are not verbalized, but rather “transferred” to the body, as they are unspeakable or cannot be elaborated by the individual. For this reason, the physical symptom is the symbol of the “unspoken” trauma and it is expressed through metaphors<sup>4,5</sup>.

On the other hand, as we can speak of “psychological trauma” distinct from “physical trauma”, we can refer to a “representative (symbolic) body”, otherwise defined as “sexual body”<sup>6</sup>, as opposed to the “physical body”.

The physical body, as it occurs in ES, responds to the homunculus or to whatever brain area is involved, while the representative body, as it occurs in PNES, does not correspond anatomically to any part of the brain structure, homunculus or other, but rather to an unconscious linguistic expression (the trauma). It is not by chance that Lacan talked about *sinthome*<sup>7</sup>, that has a structure similar to *aletheia* (described by Heidegger as the place where our own’s true essence is concealed).

This was masterfully represented in Raffaello Sanzio’s last painting (“The Transfiguration”, 1520), already correlated by Janz to the “Passion of Christ”<sup>8</sup>. By a different interpretation, nowadays we could suggest that the “epileptic” boy in reality “plays” for the crowd in the lower part of the painting the unspeakable truth, namely the Transfiguration of Christ (Figure 1). Essentially, the child draws upon himself what cannot be spoken, transforming his body into word. The child, through the attack occurring in his body, makes visible the transfiguration, which, through him, can be recognized and revealed.

Precisely because the phenomenon derives from two different types of traumas, one a physical scar, the other a psychological wound, and affects two different worlds or “bodies”, although the phenomenological expression, represented the dissociative experience, is identical (Erba, personal communication), patients with ES and PNES express themselves through different semantics<sup>9</sup>. Recent studies have used linguistic analysis<sup>10-13</sup> to investigate the verbal expressions that individuals with ES or PNES choose in describing the critical episodes.

Subjects with ES principally concentrate on the direct description of the critical episodes, including the surrounding context only as a corollary to a very painful experience<sup>14</sup>.



Figure 1. Raffaello Sanzio, *The Transfiguration*, 1520.

They describe the attacks in appropriate terms<sup>15</sup>, although they conceptualize them as extraneous entities<sup>16</sup> (from the original meaning of the Greek term *epilambanein* for epilepsy: to be seized), making in that way an effort to prevent or avoid the attack. Their account starts with the direct description of the attack<sup>17</sup>.

Conversely, individuals with PNES concentrate mainly on the context within which the attacks occur, enriching the description with details, as well as on the consequences of such experiences. They report the attacks as expression of their own state of mind<sup>15</sup> revealing a marked tendency to “dramatize” the experience; often they start talking about the attacks moving the attention on the pharmacological treatment<sup>17</sup>.

Finally, the different focus of attention noticed in the two groups when describing how they experienced the attacks becomes evident also in the linguistic style they adopt: while individuals with ES employ a language that tends to reproduce the attacks in an almost concrete/aseptic form, individuals with PNES tend to use a language rich of metaphors or similitudes related mostly to attributes of space and place<sup>16</sup>.

The objective of the present work is to analyze the psychological meaning of the two different semantics. Since the

description of the underlying mechanisms is still lacking in the literature, we hope that a better knowledge of the phenomenon may contribute to a greater understanding of these two different clinical conditions.

**ANALYSIS OF THE LINGUISTIC CLUSTERS**

The linguistic studies available so far<sup>10-12,15</sup> are all concordant indicating a number of findings, only briefly mentioned before, that characterize the two semantics. They are summarized in Table 1.

The purpose of this study is to analyze from a psychiatric point of view the specific clusters of signs and symptoms observed in the two groups. We will provide examples derived from the transcript of 55 interviews obtained from patients with either ES or PNES whose diagnosis was documented by monitoring the attacks on video-EEG in the following centers: Milan, Messina and Rochester. The characteristics of the patients' sample are described in previous works from our group<sup>5,9-11</sup>.

**Focusing the attention on the context vs. the attack**

As previously mentioned, an individual with ES tends not to elaborate on the context, unless to mention it simply as a descriptive or accidental element, whereas the individual with PNES concentrates on the context and on the presence of bystanders.

In describing the attack, individuals with ES perceive the context as hostile, because it undetermines their own image and because it leads to a representation of self as "another different than self". Thus, it becomes an attack on one's own self-esteem. The attack is, therefore, described hastily and as an ac-

cident. This comes naturally, since the loss of consciousness could be interpreted as a dissociative phenomenon (the paroxysmal discharge of the neurons) that interrupts the existential continuum and, consequently, represents a traumatic event.

For individuals with PNES, the attack is perceived in function of the context and of the inner emotional world of the individual involved. Semantically, the context is part of the attack itself and is integrated within it. This is no surprise considering the mimetic nature of the hysteric symptomology, which tends to be intertwined with the context and to display signs that relate to the moment in history<sup>18</sup>. While in Charcot's times, the predominant phenotype was the hysterical fainting, typical of the female subject, viewed as fragile and weak, and all male hysterical manifestations were absent, nowadays, even if still more prevalent in the female gender, symptoms are reported in both sexes, displaying a modality of communication that utilizes the body as a theatrical presence in the context of a society that otherwise would not come to a halt if confronted with other manifestations.

Therefore, a first major difference between patients with ES and PNES is the way in which they use the surrounding environment. For those with ES, the purpose is to escape from the context in order to conceal their illness. For those with PNES, the context becomes the theatre in which they show their own inexpressible distress. Since a PNES represents a form of language (and all patients with PNES have their own story to tell), its narrative must reach out to the "audience", in this case represented by the bystanders.

The context represents, in Freudian terms, the secret theatre where the unconscious can manifest itself publicly, albeit disguised, just like in a dream.

The examples presented in Table 2 clearly show that in people with ES the narrative is extremely concise, whereas in patients with PNES attack and context are integrated.

Table 1. The linguistic studies that characterize the two semantics, ES and PNES.

Semantic markers	ES	PNES
I. Attention to the context vs. the "attack"	Attention is given to what's happening to the body or to what the body has to endure, whereas the context remains very marginal in the narration.	Much attention is given to the context, to the presence of bystanders, not only as a descriptive element, but also as integral part of the scene.
II. A body that is the victim vs. a body that is the protagonist of the "attack"	The attack is viewed as an attack that turns against the body, which responds to an external power.	The attack may be perceived as starting in the body, that eventually may become integrated with the context.
III. To maintain vs. to alter the description of the attack with respect to the usual "narrative"	The narration is more fluid, with limited or no pauses, quick and eager when providing a free-style account of the attack; slow and grueling when trying to describe the seizure in detail.	No variability in pace, fluency and quality in the narration of the attack, from the moment the seizure occurs to the open discussion.
IV. To close vs. to keep open the "gap"	Attempt to reduce to a minimum the duration of the loss of contact that characterizes the attack by giving a personal view of the gap.	Focus on the gap itself amplifying it, or reporting how bystanders described the gap.
V. To explain vs. to "impress"	Attempt to objectively describe the attack with focus on what had happened, even if it is carried out in a fragmented manner, and with difficulty.	Presence of lexical and linguistic choices aimed at impressing the interlocutor or emphasizing the dangers associated with the attack.
VI. Use of metaphors or "similarities"	Descriptive images of the attack, using a more technical and concise language.	Highly dramatized images without providing a precise description of the person's own state of mind.
VII. Narrative starting with the attack vs. "medications"	Starting with the attack.	Starting with the medications.

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Table 2. Examples that show that in people with ES the narrative is extremely concise, whereas in patients with PNES attack and context are integrated.

ES	PNES
<p>“I lose awareness when I have seizures and I just have been told after... it’s like a déjà-vu feeling and sometimes... like a taste in my mouth and this sensation comes with the déjà-vu, like a medicine or a metal taste in my mouth... It’s not always the same because sometimes the sensations come sometimes only some of the symptoms come... the first time everything that I’ve just explained this far, there’s the déjà-vu, the taste in my mouth, me feeling like an obnoxious sensation that I was gonna pass...”</p>	<p>“I was 16... but there isn’t any clinical documents about that because my parents thought that it was like... like an occasional event; moreover my father is a nurse and... he managed the situation, so that they didn’t worry so much about... I was studying and then... my parents were calling me for... because I was unconscious and then I can’t remember anything more... or better my vision got blurry and...”</p>
<p>-----</p> <p><i>Original (Italian):</i> “Camminavo in giardino, il giorno di san Patrizio, avevo in braccio mio nipote. Mi sono risvegliata circondata da persone”</p>	<p>-----</p> <p><i>Original (Italian):</i> “Giocavo a frisbee con uno dei figli di mia nipote, quindi mi stavo esercitando anch’io, ero quasi senza fiato e il mio cervello andava a cento miglia al minuto”</p>
<p><i>Translation:</i> “I was walking through the garden, holding my grandchild in my arms, San Patrick’s day. I woke up surrounded by people”</p>	<p><i>Translation:</i> “I was playing frisbee with one of my niece’s sons; thus, I was overexerting myself, I was breathless and my brain was rushing one hundred miles a minute”</p>
<p>-----</p> <p><i>Original (Italian):</i> “Dopo mi sono sentita molto stanca, non ricordo nulla di quello che è successo”</p>	<p>-----</p> <p><i>Original (Italian):</i> “Qualcuno ha bruciato i pancake dove vivo ed è partito l’allarme antincendio che ha le luci stroboscopiche, ne ho una in camera mia. Ho guardato la luce e ho avuto l’attacco”</p>
<p><i>Translation:</i> “Afterwards, I felt exhausted, without recalling anything of what had happened”</p>	<p><i>Translation:</i> “Somebody burned the pancakes in the building where I live. That set up the fire alarm that is equipped with stroboscopic lights. There is one also in my room. I looked up at the light and I had the attack”</p>
<p>-----</p> <p><i>Original (Italian):</i> “Stavo lavorando. Mi hanno raccontato che sono uscita da lavoro e camminavo per strada, mi hanno recuperato dei colleghi, io non mi ero accorta di nulla”</p>	<p>-----</p> <p><i>Original (Italian):</i> “Avevo appena finito di lavare i piatti io, mi è stato detto che mi sono seduta sul divano e tutto all’improvviso ho iniziato a tremare e i miei occhi si sono illuminati e si sono voltati all’indietro, non ricordo nulla, non mi ricordavo nemmeno di avere un figlio e ho un figlio di sette anni, quindi... è stato un po’ spaventoso. Hanno detto che è durata 45 minuti. La sorella del mio ragazzo era lì, il suo fidanzato, un mio amico e anche il nipote del mio ragazzo era lì, quindi lo hanno visto tutti”</p>
<p><i>Translation:</i> “I was at work. I was told that I had left work and was walking on the street. Some colleagues found me. I was not aware of anything”</p>	<p><i>Translation:</i> “I had just finished to do the dishes. I was told that I went to sit on the sofa and, all of a sudden, I started trembling, my eyes lit up and rolled back, I do not remember anything, I did not even remember I have a seven year old... Thus. It was a bit terrifying. They said that it lasted 45 minutes. The sister of my boyfriend was there, her boyfriend, one friend of mine and also the nephew of my boyfriend... So, everybody saw it”</p>
<p>-----</p> <p><i>Original (Italian):</i> “Non ne ricordo mai nessuna”.</p>	<p>-----</p> <p><i>Translation:</i> “I never remember anyone”.</p>
<p>-----</p> <p><i>Original (Italian):</i> “Prima che arrivasse andava tutto bene, dopo è stato tutto una merda”.</p>	<p>-----</p> <p><i>Original (Italian):</i> “Prima che arrivasse andava tutto bene, dopo è stato tutto una merda”.</p>
<p><i>Translation:</i> “Before it happened, everything was alright, and then everything turned to shit”</p>	<p><i>Translation:</i> “Before it happened, everything was alright, and then everything turned to shit”</p>
<p>-----</p> <p><i>Original (Italian):</i> “Mi hanno visto che cadevo come se mi cedessero le gambe”.</p>	<p>-----</p> <p><i>Original (Italian):</i> “Mi hanno visto che cadevo come se mi cedessero le gambe”.</p>
<p><i>Translation:</i> “They saw me falling as if my legs gave out”.</p>	<p><i>Translation:</i> “They saw me falling as if my legs gave out”.</p>
<p>-----</p> <p><i>Original (Italian):</i> “La mia ragazza mi ha raccontato che cado e comincio ad avere le convulsioni”.</p>	<p>-----</p> <p><i>Original (Italian):</i> “La mia ragazza mi ha raccontato che cado e comincio ad avere le convulsioni”.</p>
<p><i>Translation:</i> “My girlfriend told me that I fell and began to have convulsions”.</p>	<p><i>Translation:</i> “My girlfriend told me that I fell and began to have convulsions”.</p>

**A body that is the victim vs. a body that becomes the protagonist of the attack**

In reference to the body as a phenomenological entity, in ES the concept of the body-object seems to prevail (Koeper), while in PNES the body, with all its life attributes, predominates (Leib).

In ES the body is a passive entity while in PNES the body is alive, precisely because it has a language on its own. While in the body-object that characterizes ES meaning and signifier coincide, in the living body typical of PNES meaning and signifier are distinct. Just like in the famous painting by Magritte (“Ceci n’est pas une pipe”/ “This is not a pipe”), a PNES is a representation of a meaning though it

is not the meaning itself, it is simply its signifier, that is, the metaphor.

The defense mechanisms in a patient with ES are aimed to the protection of one's own body and are mostly concentrated on the dissociative phenomena. Since epilepsy is a trauma, there can be amnesia, avoidance to mention where the attack occurred, to verbalize or recount (describe) the attack.

There is a greater tendency to shift toward metonymy rather than the use of metaphors. This is because ES is the trauma and not the representation of the trauma. The dissociative phenomenon is apparent in the broad lines of the "description" of the attack. Individuals with organic pathology cannot have full access to self-expression because they are under the constant threat of losing control of their own body, which is exactly what happens in epilepsy. This is also apparent in the Rorschach test<sup>19</sup> because subjects with ES

do not have access to their personal phantasy world, defined as unconscious desire processing, and their attitude when confronting an ambiguous stimulus such as the one presented in the test leads them to being defensive, without revealing anything about themselves. The interpretation of the tables is hard because the content is in itself evocative of something else, which is very likely to give that person great difficulties. As Piotrovsky claims<sup>20</sup>, there are specific signals that characterize the Rorschach of a person with an organic illness and one of these is not being able to integrate the element of color, proposed in the tables, in the elaboration of one's answers.

Patients with PNES do not experience the "deception of the body", in that, paradoxically, the body is their ally since it allows for the expression of a conflict. Therefore, the body is visible and treatable. PNES are not a trauma per se, but are

Table 3. Differences in semantics between patients with ES and PNES.

ES	PNES
<p>"... A warning phase... as a sneeze that [it] starts to load and then... it remain so..."</p> <p>-----</p> <p><i>Original (Italian):</i> "Dopo mi sono sentita molto stanca, non ricordo nulla di quello che è successo"</p> <p><i>Translation:</i> "Afterwards, I felt very tired, I don't remember anything of what has happened"</p> <p>-----</p> <p><i>Original (Italian):</i> "Stavo lavorando. Mi hanno raccontato che sono uscita da lavoro e camminavo per strada, mi hanno recuperato dei colleghi, io non mi ero accorta di nulla"</p> <p><i>Translation:</i> "I was at work. I was told that I had left work and that I was walking in the street, I was rescued by some of my peers, I was not aware that anything had happened"</p> <p>-----</p> <p><i>Original (Italian):</i></p> <ul style="list-style-type: none"> <li>• "Perdevo conoscenza"</li> <li>• "Giramenti di testa"</li> <li>• "Non mi usciva la voce"</li> <li>• "Mi si chiudevano gli occhi"</li> <li>• "Non riuscivo a parlare"</li> <li>• "Avevo le vampate"</li> <li>• "Mi sformo mentalmente"</li> <li>• "Era un palcoscenico perché si chiude il sipario"</li> <li>• "Ero un cadavere. Avevo un ronzio nelle orecchie"</li> </ul> <p><i>Translation:</i></p> <ul style="list-style-type: none"> <li>• "I was losing consciousness"</li> <li>• "Dizziness, light headedness"</li> <li>• "I couldn't get the words out"</li> <li>• "My eyes would keep closing"</li> <li>• "I couldn't speak"</li> <li>• "I had hot flashes"</li> <li>• "My mind falls apart"</li> <li>• "It is like being on a stage when the curtains close"</li> <li>• "I was like a corpse. My ears were ringing"</li> </ul> <p>-----</p> <p><i>Original (Italian):</i> "... un formicolio che sale di qua, una sensazione di chiusura allo stomaco..."</p> <p><i>Translation:</i> "... a tingling sensation that rises from here... I felt as my stomach was closing up..."</p>	<p>"The seizure made me dance at my 18th birthday party"</p> <p>-----</p> <p>"You had no control of your body... it's just blank... it's just like blank... I mean you can't describe it, you don't feel anything, you don't see anything... it's just... missing space... to me it is... it's like the time, you don't even know where it went... and I don't even know what my brain could have been thinking or doing at that time... because it didn't register".</p> <p>-----</p> <p><i>Original (Italian):</i> "si addormenta metà corpo, sempre la parte sx, non la sento più [...] ricordo fino a quando si è addormentato il corpo"</p> <p><i>Translation:</i> "Half of my body gets numb, always the left side, I do not feel it anymore [...] I remember everything up to the point when my body went to sleep"</p> <p>-----</p> <p><i>Original (Italian):</i> "Mi sento un chiodo qua... un trapano quando ti sfregia il cervello..."</p> <p>"Non sono io quando inizio ad avere queste crisi, non esisto, non so quello che mi sta succedendo... non sono io, è un'altra persona, non la faccio io..."</p> <p><i>Translation:</i> "I feel a nail right here, like a drill that scars the brain... I am no longer myself when I start having the attack, I do not exist... have no idea of what is happening... is no longer myself, is an other person, it is not me who does it..."</p> <p>-----</p> <p><i>Original (Italian):</i> "Stavo parlando con una collega e mi sono lasciata andare giù. Penso di aver battuto la schiena e la testa. Ma non ricordo. C'è voluta una settimana per tornare in sé"</p> <p><i>Translation:</i> "I was talking to a colleague of mine when I felt myself go down. I think I fell on my back and on my head. But I can't remember. It took me a week to get back to normal."</p>

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a representation of a trauma, at a deeper level. This, of course, does not eliminate the pain caused by the trauma.

The differences in semantics are clearly shown in the examples reported in Table 3 and are particularly evident in the conciseness of the reports from patents with ES.

**To maintain vs. to alter the narrative of the attack with respect to normal conversation**

Through an analysis of how patients describe the attacks, compared to their usual every day conversation, it is possible to evaluate the presence or absence of changes in the narration velocity, fluidity and quantity. When describing an attack, patients with ES have great difficulties explaining what they went through. When asked to describe what they do in their spare time, there is a marked change in their speech; it becomes faster, more fluid, more captivating, without pauses to reflect upon what to say. Moreover, there is more expressiveness and harmony in both facial and linguistic expression.

The linguistic component and its variations may also vary depending on the way they are used. The fundamental difference is that, when facing the attack, individuals with ES find themselves “short of words”, because just speaking about their trauma is in itself sufficient to inhibit their own narrative.

By contrast, patients with PNES find that speaking about their trauma is a way to compensate for their distress, and, therefore, they set up a dramatized form of communication, replete with details, precisely to impress the others and get their attention through the description of their own symptoms.

**To close vs. to keep open the gap**

Patients with PNES are unable to describe their own attack, since this it is not at the core of their distress, but rather

they give a representation of it. That, albeit bothersome and painful, represents the best possible compromise in order to avoid a psychic breakdown.

The use of language in patients with PNES reflects the same barrier that blocks the acknowledgment of their discomfort. They do not know how to speak about themselves and are unable to access a more symbolic language since the solution to their problem is to focus entirely on the body. It is as if the body were the nest where the trauma and the ensuing anguish are kept hidden and neither can be expressed because inaccessible to any attempt of elaboration

Patients with ES, in this respect, are more “free” because for them the problem is the illness and they concentrate also on the many modalities to resolve it, since the illness represents an impediment to their personal fulfillment. Examples of semantics are presented in Table 4.

**To explain vs. to impress**

In describing their own attack, patients with ES try to explain what happened to them so that they can share something that they find frightening.

In patients with PNES, the description is rather impressionistic, in line with the old hysterical semiology of the belle indifference (Freud). In reality, the subject employs a dramatized form of speech to avoid speaking about their pain and to impress others. The symptom is used to provide the illusory belief of being at the center of the audience attention. They perceive no other way to obtain such attention (which is also a cause of pain).

The communication is lengthy and full of details precisely to impress the others who must feel literally struck by what they hear, even if further probing reveals all the emptiness behind it. The listening space is the beginning of a journey toward self-awareness.

Table 4. Examples of semantics.

ES	PNES
<p><i>Original (Italian):</i> “Ma rimango vigile... e riesco a rispondere... dura 2-3 secondi e basta... mia moglie sa cosa succede, dopo 33 anni mi capisce”</p> <p><i>Translation:</i> “But I remain vigilant... and I am able to respond... it only lasts 2-3 seconds... my wife knows what is going on, after 33 years she understands me”.</p> <p>-----</p> <p>“A sense of confusion and dissociation... I had much more difficult remembering what I was doing, and I had to try hard to focus”</p> <p>-----</p> <p>“I was at the department store... it happened, when I woke up there were people surrounding me... he (her fiancée) gave me my medicines and we went back home”</p> <p>-----</p> <p><i>Original (Italian):</i> “... come è stato è sempre un qualcosa di piccolo. sempre come è ora è stato sempre da prima [...] è un attimo. Non è che sia tanto, io lo chiamo come un attimo fuggente punto e stop...”</p> <p><i>Translation:</i> “... as in the past, it is always something small... As it is now it always was before [...] It’s a split second... it is not much, I call it a fleeting moment, that’s all”</p>	<p><i>Original (Italian):</i> “... non so spiegare come mi sono sentita, boh, una sensazione strana comunque eeeehhhh, poi nulla, mi ricordo che è arrivata mia madre gridando che ero morta perché si era spaventata ehhe e niente ...eh sì sentivo mia madre che diceva ‘oddio è morta è morta...’ non ero molto... molto lucida... niente poi è venuto il 118... è arrivato quasi subito quindi, se non sbaglio...”</p> <p><i>Translation:</i> “... I can’t describe how I felt, anyway it was a strange feeling, other than that eeeehhhh, nothing, I remember that my mother arrived screaming in horror that I was dead, and, well yes, nothing... eh yes, I could hear my mother saying ‘Oh my God she’s dead! She is dead...’ I wasn’t very... very lucid... then 911 came... it arrived, very quickly, if I’m not mistaken...”</p> <p>-----</p> <p>“I woke up at the hospital and my mother was there with me, I didn’t remember to have given her number... my memory was gone... when I woke up I was at the hospital... I had bruises on my face...”</p> <p>-----</p> <p><i>Original (Italian):</i> “questa specie di malessere dentro... ero in un altro mondo...”</p> <p><i>Translation:</i> “This kind of discomfort inside... I was in another world...”</p>

Patients with ES on the contrary need to explain their distress because it is the only way they can try to find a solution to their problem. They cannot miss the opportunity to be heard, even if this generates further discomfort, since the moment the illness is unveiled is also the moment one may be able to find a space for healing.

It is essential in both cases to maintain an inquisitive attitude and ask questions that can help these subjects to further explore their condition. For patients with PNES, the purpose is to find new reassuring words that may help them to separate themselves from the symptom and look at the

real issue. For patients with ES, is to encourage them to explore new roles, other than the sick role. Table 5 depicts the narrative differences between individuals with ES and PNES.

**The use of metaphors and similitudes**

Out of the similitudes observed in the 55 interviews analyzed, we tried to extrapolate the image or theme they were referring to, in an effort to bring such verbalizations as close as possible to a symbolic content.

Table 5. Narrative differences between individuals with ES and PNES.

ES	PNES
<p>“I was driving home with my kids... I woke up in a hospital, I don’t remember anything... only thing I remember were these sensations, waking up and people asking me questions about why did I crush...”</p> <p>-----</p> <p><i>Original (Italian):</i> “Ho sentito una scossa elettrica improvvisa... una corrente nella faccia...”</p> <p><i>Translation:</i> “I suddenly felt an electric shock... a surge running through my face...”</p> <p>-----</p> <p>“... a sort of confusion and a separation between me and the external world which proceed... I was working at the hospital that morning...”</p>	<p>“I cracked my head... I remember that... my mother arrived screaming that I was dead... and I thought I was dead because I wasn’t so... clear headed”</p> <p>-----</p> <p>“I felt like someone beat me up... I thought it was a dream”</p> <p>-----</p> <p><i>Original (Italian):</i> “Nei primi anni quando avevo queste forti crisi che mi trovavo pure in ospedale, vedevo delle persone che non ci sono più adesso [...] sono morte [...] e poi il mio sguardo prende un punto fisso e rimane su quel punto, anche se una persona mi viene mi cerca di... ci vuol più tempo per... tipo mi chiama e io non la sento. [...] E il sonno mi è rimasto troppo pesante anche adesso”</p> <p>“[...] io quando inizio ad avere queste crisi non esisto non so quello che mi sta succedendo, tutti i movimenti irregolari che mi succedono non so... non sono io è un'altra persona non la faccio io [...]”</p> <p><i>Translation:</i> “For the first few years when I was having these strong attacks, that would even end up with me in the hospital, I would see people who have passed away [...] they are dead [...] and then I stare at a one point and my eyes remain fixated on that point even if someone comes to me and tries tooooo... more time is needed for... for instance, they call me but I don’t hear them</p> <p>[...] And my sleep is still too heavy for me even now” “[...] and when I start having these attacks it is like I don’t exist and I don’t know what is happening to me, all the irregular movements I am having, I do not know... It’s not me, it’s another person, I’m not doing it [...]”</p> <p>-----</p> <p>“I know an epileptic seizure can kill you [...], I stayed awake all night”</p> <p>-----</p> <p>“I have brief spells [...] a state of hypnotic trance”</p> <p>-----</p> <p>“I stopped working... because it was too dangerous...”</p> <p>-----</p> <p>“You don’t feel or see anything it’s like a blank... I don’t even know what my brain is doing or thinking...”</p> <p>-----</p> <p><i>Original (Italian):</i> “... io ero a terra... i miei genitori erano preoccupatissimi... e appunto salire sull’ambulanza che non ero mai salito ero per metà spaventato e metà eccitato, wow salgo sull’ambulanza [...] ho pensato proprio, mi riaccadrà sempre allora... non potrò più dormire tranquillo...”</p> <p><i>Translation:</i> “... I was on the floor...my parents were really worried ...“... and when I got into the ambulance for the first time, I was half scared and half excited, wow I’m getting into an ambulance [...] I always thought that it would happen to me again so...I will no longer be able to sleep soundly”</p>

### *Psychodynamic interpretation of linguistic findings in patients with epileptic and psychogenic non-epileptic seizures*

Patients with PNES mostly use similarities that can be grouped under the common theme of “uncertainty”, (“It’s like having the flu... and I start sweating” “My legs were like a jelly” or “kind of like going through a tunnel. It’s like an airplane... you’re going down the runway and it’s pretty rough...”). The focus is on their own internal state rather than the attack itself. There are also similarities that refer to the theme of “judgement” and of “control” (“I hear these noises in my head... my body is in control, it controls itself”). This underlines what mentioned before, that the symptoms, as they are expressed, tend to be externalized more as moments of discomfort, rather than capturing their internal significance, as if this were a mental state.

Additionally, we see the use of very dramatic images: “face on fire”, “bloodshot eyes”, “speech block”, without however providing a precise explanation of the state described (“I feel like a blister on this side that tickles my throat. At this point I develop a violent cough with a feeling like vomiting that prevents me from breathing... it’s like a little bubble that pops...”).

On the contrary, patients with ES use mostly terms that focus on the description of the attack and their language is calm and more technical (“my voice could not come out”, “I felt something rising up”, “something was preventing me from speaking”). The similarities they use refer mostly to the broad themes of “protection” or “impediment”, projecting in this way the image of a sick individual who badly needs a cure and requires a lot of attention. “I think it’s coming because my body and my hands are starting to feel strange and I am starting to open and close my fists” or “the bed started shaking...”).

Another element is the correlation with what is happening in the environment. In patients with PNES the attacks are much more likely to arise when they are in the presence of other people. The contexts of reference are: in church, in a garden, at work, at the doctor’s office, at the restaurant, at a lounge, at school, or “since my father passed away” (which indicates a very strong emotional involvement). Even in patients with ES, there is a correlation with the surrounding context and the presence of bystanders, but without the need to be observed, as in the case of subjects with PNES.

The environmental element seems to be more of a determinant factor in patients with PNES as if the verbalization of the attacks were a mean to modify a situation experienced as negative.

According to our observations, patients with ES experience what is defined as the “betrayal of the body”. Namely, their own body begins to do things that cannot be controlled nor predicted (“I was gathered up like a candle... like a hedgehog that gathers...”). However, it is significant that, presumably after acquiring more knowledge of the illness and its pharmacological treatment, the patient may use metaphors that focus on “change” and on the “acceptance” of the current or previously experienced illness (“I feel like another person” or “I feel like I just came down from the clouds”). From a semantic point of view the only real metaphor we encountered appeared in the report of a subject with ES: “I was a dead body”; but even in this case, one can notice how it is centered on the body, making a direct reference to the part most likely to be affected by an epileptic manifestation.

The defense mechanism commonly used is the repression. Namely, unacceptable contents are relegated to the uncon-

scious and could not be recalled. However, the contents persist and manifest themselves in a series of escalating symptoms of which the attack could be one. The broad theme that emerges mostly in patients with PNES is that of “uncertainty”, easily linked to one of the principal characteristics of the hysteric personality, which is to maintain an attitude of “not knowing, not seeing, and not recognizing” reality. The symptom represents the “disappearance of the idea (the trauma) but the affect persists (which is expressed through the symptom)”.

### **The emotions**

The following are some reflections on the presence, or absence, of emotional connotations during the reported “attack”. Patients with PNES do not report emotions related to the context or to the attack itself. All the attention is projected on a reference figure, who functions as observer and also as rescuer in such moments of peril.

The accounts reported by patients with PNES reflect the urgency to immediately translate the problem in medical terms without a chance to reflect on the intermediate determinants, considering that the attack, in most cases, occurs during stressful situations such as undergoing an exam, doing homework, having a rift with a friend, etc.

Subjects with ES, on the contrary, show greater “competency” in talking about their seizures, describing the state of fear and agony associated with them. The same when talking about the pharmacological therapy they are following. These subjects speak openly of their distress and, above all, they ask themselves about the illness, harbouring the fear that it may be something very serious.

Conversely, subjects with PNES describe the “attack” as a reaction (to something) and in their accounts they consider such manifestations as part of a behavioural response. It is interesting to note that they do not use similarities while in subjects with ES we found at least two, that appeared quite significant with respect to what those subjects have experienced.

A recurrent emotion in subjects with ES is “fear” that in one case was identified with the anguish evoked by “the wild wolves” (as described by an eight-year-old child). Subjects with PNES describe their state as “strange” and it is remarkable how the caregiver becomes the key figure, who also «serves» as an explanation for what they are going through.

Emotionality represents a fundamental feature when trauma comes under discussion. If subjects are able to identify and name their emotions it means that the traumatic attack can be looked at and, as such, it can be confronted.

### **CONCLUSIONS**

The current work outlines the main elements derived from the analysis of semantics in subjects with ES and PNES and demonstrates the profound differences that characterize the two groups. This is the basic difference between patients with PNES and ES. Subjects in the former group are unable to identify or acknowledge their emotions because their symptoms result from an agonizing fear of past experiences that cannot be expressed.



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Subjects with ES, instead, are willing to discuss and even try to elaborate on their emotions. For them this is a useful mean to confront the disease, a condition that may be unsurmountable but at least can be faced (up front), to everyone's benefit.

In general, experiencing a disease (real or symbolic) is an attack that deserves constant and in-depth probing because it offers the opportunity to explore the emotional world and the psychic structure of the individual in front of us.

The treatment cannot ignore all those elements because, otherwise, it would become a sterile exercise of prescribing medications. Paying proper attention to the person is the only way to preserve the dignity due to any state of illness.

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## REFERENCES

1. Lesser RP. Psychogenic seizures. *Neurology* 1996; 46: 1499-507.
2. LaFrance WC Jr., Baker GA, Duncan R, Goldstein LH, Reuber M. Minimum requirements for the diagnosis of psychogenic nonepileptic seizures: a staged approach: a report from the International League Against Epilepsy Nonepileptic Seizures Task Force. *Epilepsia* 2013; 54: 2005-18.
3. World Health Organization. The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research. Geneva: World Health Organization, 1993.
4. Beghi M, Negrini PB, Perin C, et al. Psychogenic non-epileptic seizures: so-called psychiatric comorbidity and underlying defense mechanisms. *Neuropsychiatr Dis Treat* 2015; 11: 2519-27.
5. Beghi M, Piscitelli D, Diotti S, et al. ES/PNES differential diagnosis after a brief training of naive researchers using a linguistic Scoring Table. *Epilepsy Behav* 2021; 114 (Pt A): 107533.
6. Foucault M. Michel Foucault: psychiatric power: lectures at the Collège de France, 1973-1974. New York, NY: Palgrave Macmillan, 2006.
7. Miller JA. Extimé. In: Bracker M, Alcorn M, Corthell MW, Massardier RJ (eds). *Lacanian theory of discourse. Subject, structure and society*. New York: NY University Press, 1994.
8. Janz D. Epilepsy, viewed metaphysically: an interpretation of the biblical story of the epileptic boy and of Raphael's transfiguration. *Epilepsia* 1986; 27: 316-22.
9. Beghi M, Cornaggia I, Diotti S, et al. The semantics of epileptic and psychogenic nonepileptic seizures and their differential diagnosis. *Epilepsy Behav* 2020; 111: 107250.
10. Cornaggia CM, Gugliotta SC, Magaudda A, Alfa R, Beghi M, Polita M. Conversation analysis in the differential diagnosis of Italian patients with epileptic or psychogenic non-epileptic seizures: a blind prospective study. *Epilepsy Behav* 2012; 25: 598-604.
11. Cornaggia CM, Di Rosa G, Polita M, Magaudda A, Perin C, Beghi M. Conversation analysis in the differentiation of psychogenic nonepileptic and epileptic seizures in pediatric and adolescent settings. *Epilepsy Behav* 2016; 62: 231-8.
12. Schwabe M, Howell SJ, Reuber M. Differential diagnosis of seizure disorders: a conversation analytic approach. *Soc Sci Med* 2007; 65: 712-24.
13. Gülich E, Schöndienst M. "Das ist unheimlich schwer zu beschreiben": Formulierungsmuster in Krankheitsbeschreibungen anfallskranker Patienten: differentialdiagnostische und therapeutische Aspekte. *Psychotherapie & Sozialwissenschaft: Zeitschrift für qualitative Forschung und klinische Praxis* 1999; 1: 199-227.
14. Bressi C, Cornaggia CM, Beghi M, Porcellana M, Iandoli II, Invernizzi G. Epilepsy and family expressed emotion: results of a prospective study. *Seizure* 2007; 16: 417-23.
15. Plug L, Sharrack B, Reuber M. Conversation analysis can help to distinguish between epilepsy and non-epileptic seizure disorders: a case comparison. *Seizure* 2009; 18: 43-50.
16. Plug L, Sharrack B, Reuber M. Seizure metaphors differ in patients' accounts of epileptic and psychogenic nonepileptic seizures. *Epilepsia* 2009; 50: 994-1000.
17. Reuber M, Micoulaud-Franchi JA, Gulich E, Bartolomei F, McGonigal A. [What the patient's history tells us about their nonepileptic seizures]. *Neurophysiol Clin* 2014; 44: 375-88.
18. Albarella C, Racalbutto A. *Isteria oggi*. Roma: Borla, 2004.
19. Rorschach H. *Psychodiagnostik. Methodik und Ergebnisse eines wahrnehmungsdiagnostischen Experiments (Deutenlassen von Zufallsformen)*. Berna: Verlag Hans Huber, 1921.
20. Piotrovsky ZA. Rorschach Test. *The New York Times* 1985, 10 dec.