The terminology of epilepsy is extensive and has changed frequently, especially in recent years. The following is an attempt to provide translators with a basic knowledge of this condition, and is meant to serve as an introduction to the broad area of epilepsy and its terminology in medical documents and fiction.

Epilepsy is a neurological disorder associated with seizures, and seizures are the clinical manifestation of epilepsy. An epileptic seizure is triggered by a sudden and excessive burst of electrical activity in the brain. In principle, any alteration in the brain may cause epileptic seizures. Genetic factors may play a role, and in people with close relatives who have seizures, the probability of seizures is increased. In persons with a genetic predisposition, other factors are more likely to induce seizures. Further causes include (but are not limited to) birth injuries, tumors, vascular alterations, stroke, infection of the brain and its membranes (encephalitis, meningitis), and head injuries. Seizures may be induced by illicit or therapeutic drugs, alcohol, drug or alcohol withdrawal, chemicals, fever, hypoglycemia (low blood sugar), and various stimuli such as bright light or television (reflex epilepsy).

Types of Epileptic Seizures
Seizures are classified into generalized and partial (localization-related, focal) seizures. The term “partial” was introduced in 1970 and replaced in 1989 by “localization-related” because “partial” implies part of a seizure rather than a seizure that starts in part of a cerebral hemisphere in the brain. “Localization-related” has, however, been used inconsistently, and “partial seizures” is still being used by many clinicians. In generalized seizures, both hemispheres of the brain are involved from the onset of the seizure. Partial seizures arise from a localized neuronal group in the cortex (the outermost structure of the brain) of one hemisphere.

―The terminology of epilepsy is one of the most complex in medicine…‖

Generalized Seizures
The most common types of generalized seizures include:

1. Absence seizures (petit mal seizures)
2. Tonic-clonic seizures (grand mal seizures)

Typical absence (petit mal) seizures (staring spells): These seizures occur in childhood and are associated with a characteristic electroencephalogram (EEG) pattern. During the seizure, the child is unresponsive for several seconds, but does not fall. Children with these seizures are often mistakenly considered to be “absent-minded.”

Generalized tonic-clonic (grand mal) seizures: These seizures are characterized by a sudden loss of consciousness, a fall to the ground (often with a cry), followed by rigidity (stiffness) of the entire body, and then jerking of the face and all four limbs. The patient may urinate involuntarily, bite his tongue, and temporarily stop breathing. Sometimes bloody foam can be seen around the mouth. The event lasts a few minutes and is followed by a short-lasting coma and, in some cases, by confusion for several hours.

Partial (localization-related) Seizures
Partial (localization-related, or focal) seizures are subdivided into the following:

1. Simple partial seizures
2. Complex partial seizures

Simple partial seizures: A patient experiencing these seizures remains conscious. These seizures may manifest themselves as convulsions (jerking) or abnormal skin sensations (such as burning or tingling with no apparent physical cause), or both. Symptoms start on one finger, one toe, or one side of the face, and may spread along the same side and to the other side of the body and become generalized. These seizures are called jacksonian seizures (after John Hughlings Jackson, who first described this condition in detail in the late 19th century), and the spreading is referred to as jacksonian march. Simple partial seizures may also manifest themselves as sensory symptoms that may include olfactory (smell), gustatory (taste), auditory (hearing), or visual hallucinations, illusions (false interpretations of real sensations), psychological phenomena such as déjà vu or jamais vu (sense of familiarity or unfamiliarity), depersonalization (feeling of detachment from oneself), or derealization (feeling of unreal surrounding), anxiety, and other symptoms.

Complex partial seizures: During a complex partial seizure, consciousness is impaired or lost, and the patient has no memory of the incident. During the seizure, the patient may follow simple commands, give answers to simple questions, or
may continue simple activities. Automatisms may occur such as lip smacking, chewing, or repeated purposeless movements of any body part. Verbal automatisms range from moaning or other sounds to repeated words or short sentences.

Both simple and complex partial seizures may be followed by a grand mal seizure.

Epilepsy in Historic Medical Documents

The earliest description of an epileptic seizure was found on Babylonian tablets dating back to the middle of the first millennium BC. These tablets describe focal and generalized seizures, and include comments about the demons who were believed to induce seizures. Demons, people thought, could be driven out if the person was conscious, but could not be removed if the patient lost consciousness. Around 400 BC, Hippocratic physicians realized that epilepsy (called the sacred disease) originated in the brain, and mentioned this fact in the Hippocratic Corpus. Nevertheless, mystic and often religious beliefs were associated with interpretations of the disease throughout many centuries. During the Middle Ages, epilepsy was considered not only to include epileptic seizures, but also short-lasting recurring symptoms such as palpitations or colics. Medieval writers mentioned a few possible causes of epilepsy, such as wind blowing from different directions or bites from mad dogs or reptiles.¹

In the 19th and early 20th centuries, when various types of epileptic seizures were recognized as such, descriptions of symptomatology became a significant part of medical documents on epilepsy. These descriptions served as the basis for research on the origins and causes of seizures. The early 20th century saw the development of electroencephalography (EEG), the recording of the electric activity in the brain, which contributed significantly to the diagnosis of epilepsy and increasingly became part of documents on this condition.

Epilepsy in Current Medical Documents

Today, technology and research on the causes and treatment of epilepsy have overshadowed clinical observations and descriptions. Results of diagnostic tests, including various brain imaging methods and advanced EEG recordings, treatment results, as well as research methods and results constitute the major content of documents on epilepsy.

The documents most commonly received for translation with information on seizures and/or epilepsy include:

- Patient charts;
- Articles on clinical trials with antiepileptics and/or surgical procedures;
- Case reports describing unusual or rare seizures;
- Review articles;
- Articles on epilepsy classification and terminology;
- Brochures with information on epilepsy for patients and their family members;
- Patient guidelines for various activities and the intake of medications; and
- Patient diaries describing symptoms and the frequency of seizures.

Epilepsy may be the major topic of these documents or else just receive a brief mention.

Translating Medical Documents on Epilepsy

Based on research advances in the etiology of epilepsy, the terminology of epileptic seizures as well as the definitions of epilepsy-related terms change frequently. Because of these rapid changes, new terms are not being used consistently by clinical personnel and researchers. Frequently, a mixture of old and new terms (with correct or incorrect definitions, or without definitions) can be found in the same document. This often results in misunderstandings and confusion.

For this reason in particular, terms related to epilepsy should be translated as accurately as possible using the target-language terms that correspond to those of the source language. This means, if old terms are used in the source text, the translation should contain the equivalent old terms. Using new terminology when translating a text that uses old terms will most likely result in errors. For example, if “temporal lobe seizures” is used in the source text, an exact translation of this term (not a translation of “partial seizures,” “localization-related seizures,” or “focal seizures”) should be used. The reason for this is that temporal lobe seizures are focal (localization-related or partial) seizures originating in the temporal lobe, and although the term “temporal lobe seizures” is no longer included in the latest classification of epileptic seizures, the newer terms—focal, localization-related, or partial seizures—are broader in scope and include seizures arising from other lobes of the brain. The terminology of epilepsy is such that equivalent terms in European target languages can easily be confirmed through Internet searches. Definitions in both languages must be checked to make sure that the equivalent term is used in the translation.
In clinical documents, we may find descriptions of other neurological (and sometimes psychiatric) disorders, as well as findings of neurological examinations, surgical reports, and EEG and neuroimaging results. Research papers may include aspects of neurochemistry, genetics, and molecular biology.

When translating material for laypersons, it is important to translate nonmedical terms using equivalent nonmedical terms. For example, the word “seizure” may be used by medical personnel as well as laypersons, but “attack” or “fit” is mostly used by laypersons. For these three terms, there may be only one term in other languages. If the source language uses the only term available for “seizure,” “attack,” or “fit” in a translation into English, the appropriate term must be determined from the context. The translator should also be aware that some terms may be offensive in one language, but not in another. For example, referring to a person with epilepsy as an “epileptic” is considered offensive by some patients. Therefore, “person with epilepsy” should be used in materials for laypersons, even if the source language contains the equivalent of “epileptic.”

To my knowledge, there are no bilingual glossaries on epilepsy available, but monolingual glossaries can be found on the Internet. The website of the International League Against Epilepsy (ILAE) is very useful and contains, among other data and information, a glossary of terms related to epilepsy, a database of antiepileptic drugs, and classifications of epileptic seizures and epilepsies.

**Epilepsy in Fiction**

Over the years, fiction writing has provided us with descriptions of epileptics and insight into the public perception of this condition, thereby contributing to the cultural history of epilepsy. Fiction writers might be attracted by the intense psychopathological symptoms of focal seizures that sometimes resemble drug-induced phenomena, or by the frightening appearance of a grand mal seizure. The writer’s own experiences with epilepsy or his observations of seizures may have contributed to the desire to include this disorder in a novel. Seizures in literature are often described from the viewpoint of the patient or observer, whose feelings and thoughts are affected by the events. Whatever the reason, epilepsy has been a topic in literature throughout history, from classical and high literature to biographies and mysteries. The website of the Epilepsy Museum in Kork, Germany, provides a list (with summaries) of novels and short stories concerned with various aspects of epilepsy.

Epilepsy may be at the center of a literary text or play a minor role. Descriptions of seizures, triggering events, prodromal experiences, treatment with its side effects and complications, the influence of the disease on the patient’s life and his personality, consequences with regard to psychological alterations and social problems, as well as the behavior of other people toward epileptic persons and their reactions to the seizures can all be found in literature. Descriptions of philosophical and religious ideas or obsessions, as well as mood changes and aggressions may be interpreted as characteristics of an epileptic personality, but are often indistinguishable from the character of eccentric persons also found in many novels. Literature does not necessarily follow textbook or scientific descriptions. Frequently, symptoms described in a novel are not identical with the real symptoms, and the question of whether the described disease is epilepsy cannot always be answered. Likewise, causes and treatments of epilepsy in literature do not always correspond to the scientific knowledge available at the time the text was written.

The following examples are an attempt to introduce the reader, within the limited scope of this article, to the great variety of epilepsy-related topics in fiction. The selection of the examples is based on my personal interests and does not indicate, in any way, that the novels and stories mentioned here have a more significant value than other literary texts dealing with epilepsy.

**Fyodor Dostoyevsky**

Dostoyevsky, one of the most famous authors in whose work epilepsy plays a major role, wrote many novels in which the disease, with its symptoms, treatments, and consequences, is embedded. The author himself experienced seizures (“all sorts of seizures,” as he once wrote in a letter to his brother).

In *The Idiot* (1868/1869), he describes, for example, the scream at the beginning of a grand mal seizure as follows: “A terrible indescribable scream that is unlike anything else breaks from the sufferer.” It is, as he continues, difficult to believe that, “it is the man himself screaming. It seems indeed as though it were someone else screaming from within the man.” The protagonist of the novel, Prince Myshkin, remembers the scream with horror, although textbooks tell us that epileptics do not remember the scream. Before one of his grand mal
seizures, Myshkin repeatedly sees the eyes of his friend and rival Rogoshin in a state of somewhat clouded consciousness. Later, when he sees these eyes again, Rogoshin is standing in front of him in a niche of a staircase with a knife in his hand. At that moment, Myshkin has a seizure that starts with the feeling of an intense inner light, followed by generalized convulsions. Rogoshin flees, and the seizure saves Myshkin’s life. The repeated appearances of Rogoshin’s eyes may be attributed to partial or focal seizures. Myshkin’s fear and the suspense in the description may, however, suggest that Rogoshin really did physically follow him.

In several novels, Dostoyevsky described what some call an ecstatic aura, where a person experiences a feeling of harmony and enormous happiness for just a few seconds. Sensory symptoms preceding a grand mal seizure are often referred to as an aura, but there is no consensus among epileptologists as to whether these experiences are of an epileptic nature. Although the scientific aspect may be relevant to medical researchers and physicians, in the context of these novels, it is not important whether the described ecstasy is an epileptic seizure or a literary description of a mystical experience.

Edgar Allan Poe

Epilepsy is an important part of three stories by Edgar Allan Poe, all of them dealing with being buried alive in a state of altered consciousness as a consequence of the disease.

In Berenice (1835), the narrator’s cousin has “a species of epilepsy not frequently terminating in trance...” The disease “pervaded” her mind, habits, and character, “disturbing even the identity of her person.” Berenice dies after a seizure. She is buried at sunset, and at midnight the narrator hears a “shrill and piercing shriek of a female voice.”

In The Fall of the House of Usher (1839), the narrator visits his old boyhood friend, Roderick. Roderick’s twin sister, Madeline, has “frequent although transient affections of a partially cataleptic character.” Madeline also dies after a seizure. “The disease...had left, as usual in all maladies of a strictly cataleptic character, the mockery of a faint blush upon the bosom of the face...” While the narrator reads a story to Roderick about a person who kills a dragon, he becomes aware of a “distinct, hollow, metallic, and clangorous, yet apparently muffled reverberation.” Madeline has freed herself from the coffin and appears in the room.

In The Premature Burial (1844), the narrator has a disorder “which physicians have agreed to term catalepsy...” Poe describes the condition as “exaggerated lethargy,” “trance,” “hemisyncope,” and “lethargic consciousness of life.” The narrator is terribly afraid of being buried alive and takes several precautions. For example, he gets the family vault remodeled so that it can be readily opened from within. “There were arrangements for the free admission of air and light, and convenient receptacles for food and water...” From the roof of the tomb, a large bell is suspended. One day, after sleeping in a berth of a ship’s cabin, he finds himself upon awakening in what appears to be a coffin, except the precautionary arrangements he had requested are not to be found. From that day on, his fear vanishes, along with his cataleptic disorder.

In Berenice, Poe calls the disease “epilepsy,” and in the other two stories “catalepsy.” The conditions described in all three stories may be interpreted as postictal states (states following a seizure) with altered consciousness. Throughout history, the usage of the term “catalepsy” was inconsistent and confusing. In the 19th century, “catalepsy” was one of many terms used to describe postictal states, but may also have been used synonymously with epilepsy. Poe seems to have used terminology in agreement with the terminology of his times.

Thomas Bernhard

In Bernhard’s novel Amras (1964), the narrator and his brother survive a family-planned collective suicide in which their parents die. Having survived, the two brothers are taken to a tower by their uncle to save them from a lunatic asylum. The narrator’s brother, Walter, has had epilepsy since birth, which he inherited from his mother. The story takes place in Tyrol (Austria), and the type of epilepsy, referred to as “Tyrol’s eerie epilepsy,” is only known in Tyrol. Walter’s seizures occur suddenly and manifest themselves as short-lasting aphasia (“momentary aphasia”) without losing consciousness. A seizure with a fall to the ground is also mentioned. Treatment of...
the disease is described in a grotesque and absurd manner, resembling descriptions of nightmares. The uncle visits the brothers twice a week and is accompanied by the internist who treats Walter with injections of a “very new chemistry.” The internist brings boxes with medications that are difficult to open, and with each visit, the boxes become larger. The internist looks brutal and extremely healthy. During the times when Walter is taken to see the internist, he must sit in a specific chair for epileptics with many straps and chains that is screwed to the floor. The waiting room is always crowded, dark, and without windows and ventilation. “Epileptic pictures” hang on all four walls showing “men, women, children, foxes, cats, and dogs with terrible epileptic seizures…all types of epileptic seizures.”

In this novel, the description of the disease is vague. Aphasia as a manifestation of focal seizures is rare and usually associated with other focal symptoms. “Momentary aphasia” is not a clinical term, and its symptoms are not described in the novel. The description of treatment has no similarity with common antiepileptic therapy and is a pure literary invention.

Translating Epilepsy-Related Texts in Fiction

When translating passages on epilepsy in fiction, it is important, as it is with the descriptions of the disease in literature in general, to convey not only the meaning but also the associated emotions, symbolism, wit, and the occasional absurdity contained within the text. For translators, it is important to distinguish between scientific and clinical terms and the terms invented by the writer that resemble clinical or scientific terms. Likewise, a distinction between true clinical and invented symptoms and treatments is important for selecting appropriate terms. Sometimes information on how much was known about epilepsy, its terminology, and treatments at the time the literary text was written is needed to provide a translation that corresponds closely to the source text. Scientific or clinical terms should only appear in the translation if used by the author, and the translation of these terms should be as accurate as the translation of these terms in clinical documents.

Conclusion

Rapid advancements in etiological studies, diagnosis, and the treatment of epilepsy have led to continual changes in the classification and terminology of epilepsy and epileptic seizures. For translations of both medical documents on epilepsy and literary texts containing references to the condition, knowledge of current and past terminologies is needed.

Notes

9. Bernhard, Thomas. *Amras* (Edition Suhrkamp, 2003). Note: the phrases in quotes were translated from the German by the author of this article.

Recommended Material for Translators

Glossary of descriptive terminology for ictal semiology: http://www.epilepsy.org/ictf/over_frame.html


