Orientation, disorientation, and misorientation

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The word *orient* derives from the Latin word *oriens* ("rising"), used to describe the place on the horizon where the sun rises (i.e., the East). Subsequently *the Orient* became a term used to describe the countries of the East (i.e., Asia). Someone was *oriented* if he was able to face eastward. Being oriented in this sense was of great practical importance, as in many religious traditions prayer was directed by facing east, toward Jerusalem. In fact, the initial definition of the word *orientation* in the unabridged Oxford dictionary of the English language is "the ability to find the direction east."

As physicians, we use the word *orientation* in a much broader sense, and are not solely concerned with the ability to find the easterly direction. Rather our use of orientation refers not only to one's spatial relationships, but also to recognition of temporal and personal relationships. Evaluating a patient's orientation in space, time, and person is the bedrock of our mental status examination. We use the term *disorientation* when one lacks one or more of these capacities.

In the book *Longitude*, by Dava Sobel, the story of John Harrison, the brilliant 18th-century clockmaker who solved the problem of accurately calculating a ship's longitude at sea, I encountered an interesting word that I have not seen used in the neurologic literature: *misorientation*. Prior to the development of satellites and global positioning systems, the ability of a mariner at sea to orient himself (i.e., determine the correct longitude or how far he had traveled east/west) was difficult, particularly in dense fog or cloudy nights when the usual celestial guides could not be seen. Knowing the accurate location was of paramount importance to ensure a safe journey. A sea captain who realized that he could not identify the proper location would acknowledge that he was *disoriented* and take appropriate safety measures until the situation cleared. A more dangerous scenario would arise if the captain thought he knew the correct direction and location when in fact he was in error, a condition referred to as *misorientation.* Over the centuries, the lack of insight and judgment of a *misoriented* captain has led to many disastrous shipwrecks.

Distinguishing between *disorientation* and *misorientation* conveys much useful information when evaluating mental status testing. For example, all of us may become *disoriented* if we are taken to an unfamiliar location, but we acknowledge our uncertain situation. Conversely, the *misoriented* person will either think he knows his correct location, confabulate a location, or argue with the informant when told the correct location. A similar neurologic distinction can be made, for example, among patients who have *cortical blindness* and are aware of their visual loss vs *cerebral blindness* (Anton syndrome) in which patients are unaware of or deny the loss of vision. The patient with cerebral blindness has an anosognosia for his visual impairment. In the same vein, the misoriented patient has an anosognosia for his disorientation and may be delusional. The distinction between *disorientation* and *misorientation* is not merely pedantic but has clinical relevance. The misoriented hospitalized patient who believes he is in an airport would seem more likely to climb out of bed in the middle of the night than the disoriented patient who knows he is hospitalized but cannot recall the name of the hospital. I recommend that misorientation be added to our neurologic lexicon, and distinguishing between orientation, disorientation, and misorientation become a customary part of our mental status assessment.

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