

## THE ART OF OBSERVATION:

Diving into color, texture, shape // “diagnosing” a Pollock, a Turner, a Zoffany // boosting clinical observation // **becoming better doctors.**

# Pictures at an Examination

■ BY MEERA LEE SETHI

**B**efore a physician even shakes a patient’s hand,” says Amy Ship, assistant professor of medicine at Harvard Medical School, “the opportunity for physical diagnosis begins.” An unsteady gait could signal ataxia; unusually pale skin, anemia. Even with blood and urine tests, CT and MRI scans, and myriad other diagnostic tools available, a physical examination remains crucial. In a recent study, it was clinical judgment, more often than testing, that led to a diagnosis.

Yet there are signs physical diagnosis skills may be fading. A study of top-tier first-year residents found that many had trouble performing 13 abdominal examination maneuvers.

If clinical observation is becoming a lost art, perhaps art could help reclaim it. More than a decade ago, Irwin Braverman, professor of dermatology at Yale School of Medicine, and Linda Friedlaender, curator of education at the Yale Center for British Art, created the Observational Skills Workshop, in which students amass visual clues to “diagnose” paintings, then apply the same process to patients. After two controlled studies demonstrated that the workshop significantly improved physical diagnosis skills, the class became a requirement for every first-year Yale medical student.

At Harvard Medical School, one of more than 20 schools that followed Yale’s lead, an elective—Training the Eye: Improving the Art of Physical Diagnosis—relies on a curriculum designed to help museum visitors and public school students become adept at seeing paintings and sculptures. The medical students learn to employ the same concepts to analyze visual clues associated with clinical ailments. The artworks that follow are a few of the dozens that are helping a generation of physicians look at patients first, test results second. ■



COURTESY OF YALE CENTER FOR BRITISH ART, PAUL MELLON COLLECTION



**GEORGE, 3RD EARL COWPER, WITH THE FAMILY OF CHARLES GORE (1775)**  
Johann Zoffany (German, 1733–1810)

Imagine a patient with nausea, abdominal pain and vomiting. Compared with those urgent symptoms, the minor detail that she is hiccuping might seem inconsequential. Yet it could be the key to her diagnosis: Hiccups can be a subtle sign of gastric volvulus, in which the stomach twists in on itself. Yale's Braverman asks students to treat paintings such as this one, from the Georgian era, as "foreign objects" whose every detail demands equal attention. They first take in the foreground, noticing, says Braverman, that "everyone is happy and jovial, and there's a celebration"—of a prominent marriage between Hannah Anne Gore and George, the third Earl of Cowper (both standing). Then the students observe, over the shoulders of the seated women, a painting of the Tuscan hills outside Florence, where Lord Cowper was an expatriate patron of the arts. But in the second picture within a picture, before which the 16-year-old Gore stands, Zoffany hints at discord: In a mythological wedding scene, Hercules ousts Calumny, a reference to the slander Lord Cowper endured after enjoying several affairs in Italy.





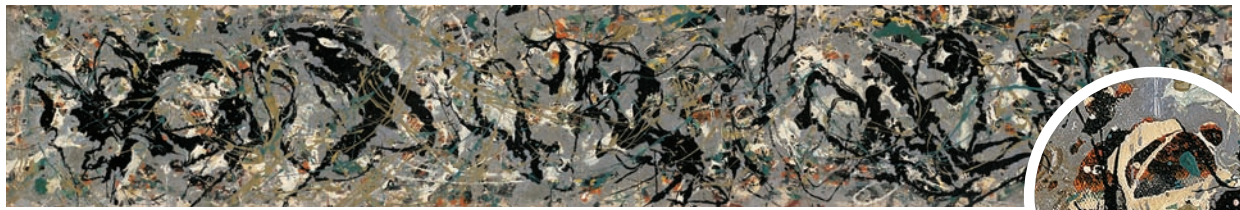
**SLAVE SHIP (SLAVERS THROWING OVERBOARD THE DEAD AND DYING, TYPHOON COMING ON) (1840)**  
**Joseph Mallord William Turner (British, 1775–1851)**

Alexa Miller, who conducts observation sessions with students at Boston’s Museum of Fine Arts, says Harvard students initially struggle with this painting. “It’s not clear whether the ship is close to land or far away, whether it’s morning or night,” she explains. “At first they get annoyed—they really want answers!” But learning to deal with ambiguity is an essential clinical skill. An elderly patient’s confusion, for example, could be the result of a change in medication, a neurological disease or many other conditions. When the cause isn’t immediately obvious, Marie-Adele Sorel, now a resident and a teaching assistant for the course, knows to proceed slowly and systematically, controlling for as many variables as possible—temporarily stopping a medication to rule out a drug-related origin, say, or taking blood and urine samples to test for infections. “You don’t need an answer to enjoy a painting,” Sorel says, “and you can care for a patient without a full diagnosis.”

 View more works of art—and their examinations—at [protomag.com/art](https://www.protomag.com/art).



CLOCKWISE FROM LEFT: MUSEUM OF FINE ARTS, BOSTON, HENRY LILLIE PIERCE FUND, 99.22; MUSEUM OF FINE ARTS, BOSTON, TOMPKINS COLLECTION—ARTHUR GORDON TOMPKINS FUND AND SOPHIE W. FRIEDMAN FUND, 1971.638; MUSEUM OF FINE ARTS, BOSTON, JULIANA CHENEY EDWARDS COLLECTION, BY EXCHANGE, 1981.438; PHOTOGRAPHS © 2009 MUSEUM OF FINE ARTS, BOSTON



**NUMBER 10, 1949 (1949)**  
**Jackson Pollock (American, 1912–1956)**

Harvard students scrutinize Pollock’s lines and dots: Here the paint forms thick swirls, there thin veins; this spot is smooth, that pitted. Then they turn their critical eyes to dermatological disorders. Student Steven Driver recalls that when he observed the angry red blisters of the herpes simplex virus, no single element revealed its identity. Yet using “multiple incomplete answers” about thickness, color, shape and distribution—characteristics students had noted in the Pollock—the class reached the correct diagnosis.



**THE LINCOLN CHILDREN (1845)**  
**Susan Catherine Moore Waters (American, 1823–1900)**

The pyramidal arrangement of the girls, the daughters of a nineteenth-century innkeeper in Newark Valley, N.Y., lends symmetry to this portrait, but the shapes of their faces and features, typical of American folk portraits at the time, are stylized and two-dimensional, drawing attention to differences in the children at each end. One has broader cheeks; one’s mouth turns upward, while the other’s is set in a dour line. In patients, too, subtle asymmetries can hide in a broadly symmetrical landscape, and noticing them is essential for diagnosing neurological disorders. “Much of what we’re trained to look for in the face has to do with comparing things side to side: muscle tone, wrinkles, the size of the pupils,” says Sorel. A form of nerve damage known as Horner’s syndrome, for example, reveals itself through a slightly drooping eyelid and constricted pupil on the affected side of the face.

