

INSIGHT



EYESIGHT: TOWARD A PSYCHOANALYTIC OPTOMETRY

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Abstract

There are different avenues to exploring visual perception and human relationships: subjective, objective, conscious, and unconscious. One alternative approach is to acknowledge the role of the unconscious in shaping what we see, what we overlook, and how doctors and patients relate to each other.

Key Words

conscious vision, unconscious vision, Oedipus, psychoanalysis, psychophysics, eye examinations, visual evaluations

Eye doctors and visual scientists objectify the sense of sight by measuring how and what people see, and by seeking answers to questions about ocular physiology and ocular pathology. Vision tests, like laboratory tests, generally have reference ranges and visual tasks have thresholds. In the course of subjective clinical testing, patients undertake the psychophysical task of choosing one lens over another. Practitioners and patients implicitly agree that the ability to identify symbols on a two-dimensional chart has predictive validity for how people function.

There are subjective elements to these seemingly objective measurements. Eye doctors make subjective judgments, based on their experiences, to administer objective tests. Thresholds for identifying exogenous stimuli are not fixed; clinicians recognize that test results are influenced by experience, attention, and context. For example, it is not uncommon for perimetry findings to change when the test is repeated the same day.

Culture can also determine visual thresholds. An immigrant child was asked in English to read the Snellen chart. His father could not understand English, and in his presence the child apparently could not read the letters. However, when his father left the room the boy could read the chart. Evidently, he did not want his father to know that he understood English.

During eye examinations, patients view targets that are flat, colorless, and stationary. These neutral images have their counterparts in the flatness of printed pages, television screens, and computer

monitors. Images in the natural world, however, are not disembodied; they are multidimensional and multisensorial. Images stir us, calm us, make us cry, prompt us to go on a journey, and invigorate us. When viewing something, we may imagine ourselves interacting with it—smelling it, touching it, hearing it. We project ourselves onto objects and people that we see, which gives us the chance to explore and experience the world in different ways.

This is the power of the gaze: An intense force emanates from the mind's eye as it scans space.^{1,2} We have degrees of freedom to concentrate on or ignore a particular image, as well as the chance to exert some effect on it and transform it. This force emerges from the joining of our inner and outer visual landscapes, so that when we view something, it is as if the viewer and the object are united.

Yet with any visual image, much remains unseen. What we feel with our gaze, we caress with our memory. As consciousness grades into unconsciousness, this interior and exterior visual web engenders relationships between the external environment and ourselves. Our internal terrain is constructed from invisible objects, fantasies, symbols, idioms, emotions, and beliefs about how we will see.

One alternative approach to the sense of sight is to explore why we see something and what we overlook, rather than examining mainly how we see and what we perceive. Vision affords us a sense of our potential, as it reflects the ways in which we can be connected to objects and people. How vision helps to guide body

movement, for example, is partially explainable using conventional theories from physiological optics. Another possibility is that this behavior involves projecting our whole selves into judging where we are in space and onto objects. We then imagine what lies beyond an object and the impulses associated with an image.

Ciliary muscles relax when the eyes focus on an object that is at an optically infinite distance. Similarly, our minds relax to be fully present in the moment, to comprehend patterns, to situate an image within a context, and to relate, on a multi-dimensional level, to an infinite number of possible visual experiences. This non-optical kind of visual acuity distinguishes us as individuals, since we respond idiosyncratically to varieties of visual experiences. Through our eyes and our minds, we have the potential to detect changes in ourselves and in the environment.³

The nature of our relationships and the intensity of our feelings shape how distinctly and vividly we see the world. Therefore, it is wrong to say that love is blind. It is when we are in love that we actually have the least restricted visual acuity.

A contemporary story and a classical drama

Two stories illustrate how human relationships, insight, and eyesight blend together. A few years ago, I received a call from a man who asked that I examine the eyes of his mother, who was a resident of a nursing home. He told me that his mother complained that she could no longer see. When I arrived at the nursing home, he greeted me and then disappeared.

At first, I did not see the nursing home patient in the room because it was so dark; a curtain screened her from her roommate. Then I saw her: she was lying on the bed wearing sunglasses. She sat up at the edge of the bed and began to tell me about herself.

Until recently, she had lived alone in her own house and was gainfully employed. She had been in good health until she had a stroke that left her unable to walk easily or lift one arm. Then she had a second stroke. This change in health distressed her, and she resented living in a noisy nursing home with a roommate. I felt pity, dread, and fear for her, and wondered if I might suffer the same fate.

I continued listening, but then remembered that I was there to examine her eyes. She told me that she could not see, and I wondered why she was wearing prescription sunglasses in a dark room. I asked if I could put her in a wheelchair, and she agreed. We moved to a room that served as a cafeteria or a social hall, where there were a number of other people. In this sunny room, she kept her sunglasses on and still insisted that she could not see. My trial lens refraction over her sunglasses did not improve her vision.

When I asked her to remove the sunglasses and put on her clear glasses with the same prescription, she was relieved to find that she could see quite well, as if a veil had been lifted. I again wondered why she had worn sunglasses in a dark room.

That weekend, I went to a church to see the classic Greek play, "Oedipus Rex."

As the play opens, King Oedipus thinks that everything is going well in his life and for his kingdom. Then a plague breaks out in the kingdom and Oedipus consults the oracle, whose message is to banish the murderer of the old king. Oedipus agrees to this and calls Tiresias the Seer to help him find the murderer. Oedipus first accuses Tiresias of murdering the king, but then Oedipus realizes that he is the murderer of his father and that he has married his mother. His mother hangs herself and Oedipus blinds himself.

I was struck by what Oedipus and the woman in the nursing home had in common. They were practical, self-made people who prided themselves on their reasoning abilities. What makes them noble is not that they suffered, but that they both responded to their suffering by feeling shame and bemoaning their fates. What they would avoid, they became; what they loathed, they were. They each wanted to know why they were suffering, even though the humiliating truth might finish them.

When Oedipus can see physically, he is blind psychologically; as he gains insight, he becomes blind physically. Both Oedipus and the woman in the nursing home had crippled themselves: Oedipus had blinded himself, while the patient wore sunglasses and thought that she could not see. Each did not want to see what they had become. Ironically, in the play, Tiresias the Seer is blind, which sug-

gests that sight of one type interferes with the sight of another kind, as if insight and eyesight are mutually exclusive.

This is one interpretation of two stories. We are all forever telling stories to ourselves, about ourselves and others. Sometimes we narrate these stories to other people. As doctors, we listen to patients' stories and serve as a witnessing presence to others. Yet as doctors we are more than a witnessing presence when we record a patient's history, symptoms, and complaints. We are not potted plants; we are also active participants in this scenario, since we have our own reactions, feelings, and our own stories.

The unconscious and the sense of sight

We take in far more visual information than we are ever aware of, and this supposedly discarded information becomes part of our unconscious memory. Our unconscious actively constructs the way that we see. In Sophocles' play, Tiresias, the blind seer, served as a kind of unconscious, shadow, or witnessing presence for Oedipus.

The unconscious contains all our repressed thoughts, memories, impulses, desires, and feelings that we are not aware of, yet still manage to influence our emotions and behavior. This critical area of the human mind lacks a sense of time and of place, of right and of wrong, and permits contradictions to exist simultaneously.⁴ The unconscious is only indirectly knowable through slips of the tongue, feelings of déjà vu, free associations, gestures, dreams, and by alliances with others.

Mental processes as well as repressed memories are beyond consciousness. It is a common experience to "have" an insight, to "see" a solution to a problem, and to "suddenly" remember to do something. Depth perception and language acquisition are largely unconscious processes.⁵

A joke told about Albert Einstein illustrates that unconscious and instinctual factors are involved in skill development. Legend has it that Einstein did not speak until he was 4 years old. Young Einstein was having dinner with his mother: Einstein: "The soup is cold, Mommy." Mrs. Einstein: "Albert, you've never said a word before!" Einstein: "The soup was never cold before."

The unconscious is notable not simply because it differs from a state of awareness. It is also a source of psychic energy and irrational thoughts. Creativity, power, pleasure, and fantasies are fostered by the unconscious.⁶ Through real and imagined images, vision functions with the unconscious as a source of creative power, such as when we give someone the “evil eye” (curiously, never a “good eye” or one that blesses), and they feel a shiver run down their spine.

This notion that our unconscious is an architect of our visual world differs from rational, objective, behavioral, and scientific approaches toward the sense of sight. It is conventional practice to use geometrical optics, ophthalmic lenses, and scientific data to help measure, explain, and improve visual perception and visual acuity. In contrast, psychoanalysis has something to contribute to optometry by offering the perspective that the unconscious helps to shape how we see the world in ways that are not directly accessible, measurable, or fathomable.

Psychoanalysis and optometry

In some respects, psychoanalysis is very easy to define and in other ways very difficult, since it refers to both an unstructured psychiatric treatment and to different theories of personality.⁷ In addition, it is difficult to become familiar with the psychoanalytic process, because you can never be a witness to it; an outsider can only read or hear about it.

Psychoanalysis is essentially a search for the truth about an individual, during which the psychoanalyst intuitively comprehends the patient’s unconscious.⁷ Rather than concentrating on whether someone’s ways of thinking are rational and objective, the psychoanalyst and the patient reach an agreement that whatever understanding develops between them is meaningful. In psychoanalysis, rational thinking is a measure of communication, more than it is the application of rules of logic, that reflects the authenticity of a patient’s past experiences, present emotions, and active imagination.⁸

The ways in which the patient relates to the psychoanalyst are expressions of the patient’s unconscious. To an analyst, the unconscious is just as real a concept as a corneal measurement is to an eye doctor. Very little about psychoanalysis is fixed,

except perhaps the “fundamental rule” to say whatever comes into your mind. The neutrality of the psychoanalyst, dream interpretation, and analyses of transference and resistance are used to explore conflicts and anxieties.

While the hidden role of the unconscious is central to psychoanalytic models, theorists disagree about this concept. In Sigmund Freud’s version, early experiences, such as the Oedipal conflict, shaped the unconscious and made it a cauldron of wishes, fantasies, and needs.⁹ Carl Jung described a *collective unconscious*, formed long ago in evolution, that contained humankind’s shared symbolic and mythological past.⁹ According to Jacques Lacan, the unconscious is a kind of language that helps give structure to the world.⁹

To those who regard an anecdotal story about human feelings as inherently unreliable, who distrust an ancient Greek drama as a source of human knowledge, the claims of psychoanalysis will never be satisfactory. Yet one does not have to agree with the ideas of any school of psychoanalysis, or even consider psychoanalysis to be a valid treatment modality, to acknowledge the power of the unconscious to shape human behavior. Readers can consult the reviews by Kihlstrom¹⁰ and Rieber¹¹ of the considerable scientific evidence concerning unconscious mental processing.

Vision plays a concrete and a symbolic role in psychoanalysis. Psychoanalysts help make what had previously been invisible to become more visible, through the use of language and idioms, just as optometrists help make what had previously been blurry to become more distinct. Freud likened some psychological processes to a telescopic or microscopic system that produces real and virtual images, some of which are optical illusions.¹²

Scientific studies of the unconscious have historical significance for both optometry and psychoanalysis. About 1850, Gustav Fechner, a pioneer of experimental psychology, developed psychophysics while trying to mathematically measure unconscious perception. Sigmund Freud incorporated Fechner’s ideas into his theories about the unconscious.¹³ Today, psychophysical methods are fundamental to performing subjective clinical refractions and to conducting experiments about human visual perception.

Conscious vision and unconscious vision

Through consciousness, we have a sense of self, we respond to sensory stimuli, we think in different ways, and recognize that we do things. What these states have in common is that we are aware that they apply to us.¹⁴ Visual stimuli, for example, can be accompanied by an awareness of how objects appear or seem to us. However, in reality, objects are not as they seem, since the brain’s representations are constructions, not exact replications.¹⁴ Constructions of sensory stimuli are influenced by presentation, timing, emotions, context, prior learning, and interactions with other senses.

There are various definitions and conceptions of consciousness and unconsciousness. On a non-psychoanalytical level, vision can be classified as either conscious or unconscious.^{15,16} Conscious vision can refer to an awareness of visual stimuli and the potential for voluntary reactions to them, such as during visual field testing.

In contrast, a pressure phosphene is an unconscious visual phenomenon. When we press a finger against a closed eyelid, we see light even though we are aware that there is no outside light stimulus. Other examples of unconscious vision include mental calculations performed to determine if one object is closer than another,¹⁰ formed mental images that are beyond awareness, neural patterns that do not emerge as images,¹⁷ the pupillary light reflex, light blink reflex, saccades, and optokinetic nystagmus.¹⁶

Whereas unconscious vision appears to be purposeful—not unlike the beating of a heart—the unconscious self seems to be relatively more chaotic and independent of external sensory stimuli. History and context influence both the unconscious and conscious selves. Optometrists generally regard findings during an eye examination as data with a history and a context that is analyzable. Similarly, information about the unconscious constitutes data with a history and a context that are analyzable, such as when dreams are interpreted.

It is hard not to have a sense of awe and respect for this magical, miraculous, and mysterious part of ourselves. The role played by the unconscious in determining the way that we see the world has fascinated some eminent people, such as the

optical scientist Hermann von Helmholtz,¹⁸ philosopher Friederich Nietzsche,¹⁹ psychologist William James,¹⁰ and psychoanalyst Sigmund Freud.²⁰

The unconscious and the optometric examination

It adds another dimension to the training experience when optometry students and optometric educators take into account the roles played by unconscious processes and ideas, including unconscious biases. After all, future doctors naturally go through self-reflection similar to that anticipated with future patients.²¹ As a result, feelings emerge unconsciously in real or conceivable situations. Students may imagine, for example, what it would be like to be poor, alone, elderly, and blind. Personal growth can come from introspection. This relentless process of inner exploration does not end with graduation; it becomes a part of what is truly continuing *self*-education.

Unconscious processes between doctors and patients remain subtle and undetermined factors in eye care. During a routine subjective clinical refraction, the unconscious is at work, as one lens is chosen over another, when a patient tries to please or confound the doctor. Another patient resolves to take better care of his or her contact lenses, and has every conscious intention to do so, yet consistently undermines this pledge.

A long time ago, an eye doctor examined a patient who had emigrated from the Soviet Union. The patient was using high plus lenses that he had selected from a pushcart in Moscow. This practitioner concluded that this person needed lenses with completely different powers—high minus—but the patient could not wear the new glasses and went back to using his previous spectacles. How would you explain this and why did the doctor relate this story decades later?

Although I performed many clinical refractions on people who had attained 20/15 vision with glasses, one person was never satisfied with her distance vision. I cannot fully understand why she was disappointed with her eyesight or why I conducted so many examinations. Another patient could not decide what color opaque soft lenses she wanted. Further, when she later received her eyeglasses, she first said that they were excellent, but then when I

asked if she was sure, she ended up telling me that she did not want them. I was exasperated with her and with myself.

I knew someone whose health deteriorated rapidly, so that he soon had difficulty hearing, seeing, and walking. He died from an aggressive brain tumor within a few months. Near the end of his life, while I was examining his eyes in his wife's presence, I said, "I think he needs to change his eyeglass prescription." The patient asked, "Who are you talking to?" He was aware that I was treating him as if he was a child or was already dead, even though he still had a keen intellect and a strong sense of himself.

I could only begin to understand why I had acted like this. Yet understanding is never complete, and intellectual information by itself is never enough. The most important knowledge is of an emotionally-tinged nature that transforms us by changing our state of mind.

It is a grand optical illusion that we can disturb, control, or understand the universe, visually and otherwise. It is truly astonishing how little we ever know about ourselves and others. Perhaps we know more than we understand.

Conclusion

It is a tenet of psychoanalysis that human beings are fundamentally relationship-seeking.²² It is the belief of one psychoanalytically-oriented optometrist that the power of vision—consciously and unconsciously—is fundamental to the formation of human relationships, even when we simply look another person in the eye or someone catches our eye.

Another fateful mythical Greek, Narcissus, personifies the interaction of insight, eyesight, and the unconscious. Narcissus was so preoccupied with viewing his own reflection in a spring that he changed into the narcissus plant. When Narcissus's mother implored Tiresias, Oedipus's blind seer, to foretell whether her son would enjoy a long and normal life, Tiresias cautioned, "Only if he never comes to know himself."²³

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