I found that of the senses, the eye is the most superficial, the ear the most arrogant, smell the most voluptuous, taste the most superstitious and fickle, touch the most profound and the most philosophical.

—Diderot (as cited in Herrmann, 1998, p. vii)

Mark Twain asserted that Helen Keller (1880-1968) was immortal—fellow to Caesar, Homer, and Shakespeare—and would “be as famous a thousand years from now as she is to-day” (Twain, 1924, Vol. 2, p. 297). Elementary school teachers have told the story of Keller’s childhood for more than a hundred years, whereas her activist and intellectual developments as an adult remain in the shadows. The environmental movement has yet to discover the importance of Keller’s contribution to an ecological understanding of the world. Nonetheless, her work provides a foundation for constructing a dynamic view of the relationship between nature and ourselves. By exploring the world, through Keller’s words, insights can be gained in regard to how humans experience nature. Perhaps, through this engagement, a more complete picture of Keller’s life and position in history can be formed.

At 19 months of age, during an illness, Keller became blind and deaf (Keller, 1902/1905, pp. 7-8). For nearly 6 years, Keller lived without concepts of nature, mind, and death (Keller, 1927, p. 20). Then, with the assistance of Dr. Alexander Graham Bell, Annie Sullivan came to work with Keller. Sullivan’s arrival on March 3, 1887, marked the most important day of Keller’s life (Keller, 1902/1905, p. 21). Sullivan immediately started to spell words, using a finger language, into the palm of Keller’s hand, but comprehension of the meaning was not instantaneous. After several weeks, Sullivan immersed Keller’s hand under a waterspout. As water flowed over her hand, Sullivan repeatedly spelled “w-a-t-e-r.” Suddenly, Keller understood the connection, and the world of language was grasped. From this point on, Keller’s learning accelerated, as she eagerly sought further knowledge. She realized that “everything had a name, and each name gave birth to a new thought” (Keller, 1902/1905, pp. 23-24). “I did nothing but explore with my hands and learn the name of every object that I touched,” Keller recalled, “and the more I handled things and learned their names and uses, the more joyous and confident grew my sense of kinship with the rest of the world” (Keller, 1902/1905, p. 25). Much of Keller’s education involved immersing herself in the fields and woods of her home. She noted that her earliest thoughts were linked with nature, as she touched flowers in bloom, streams cascading over rocks, and soil being prepared for seed. She learned how the sun and rain help make the crops and trees grow. And with the pass-
In addition to learning Braille and the finger alphabet, Keller read lips by placing her fingers on another's lips to sense the movement of the mouth and the vibrations of the voice. Through the years, Keller learned to speak with her mouth. Although her voice remained guttural, she was able to speak in public, with Sullivan serving as an interpreter when needed.

Keller (1902/1905) studied English literature, algebra, geometry, Greek, Latin, history, French, and German (pp. 83-84). In 1900, she entered Radcliffe College and graduated, cum laude, 4 years later (p. 96). While at the university, Keller studied philosophy in addition to her previous studies. She remained a voracious reader throughout her life, noting, “literature is my Utopia” (p. 117). Her lifelong studies included the works of such thinkers as Plato, Aristotle, Lucretius, Shakespeare, Bacon, Descartes, Goethe, Schiller, Kant, Wordsworth, Shelley, Hugo, Emerson, Thoreau, Whitman, Henry James, Darwin, Alfred Russell Wallace, Marx, Twain, William Morris, Kautsky, Wells, and Shaw. Alexander Graham Bell, a dear friend, encouraged Keller to help the deaf and to write about the larger world from her perspective (Keller, 1929, pp. 81, 123). Likewise, her friendship with Mark Twain inspired her to fight injustice, militarism, and imperialism, while retaining a kindness and love for humanity (Keller, 1929, pp. 48-50). From her personal experiences and reading, Keller became a leading social reformer, an advocate for physically disabled people, and a committed socialist.

Criticisms were often leveled against Keller for describing a world that she could not visually see. In defiance of critics who denied her the ability to describe what she could not see, Keller (1903/1910) wrote The World I Live In (from which several chapters are reprinted here, along with her speech, “Social Causes of Blindness”). In this work, she illuminated how humans understand and interact with nature. Although Keller drew on Descartes’s maxim, “I think, therefore I am,” as an inspiration to use her inner senses and reasoning to organize her knowledge, she found that Kant’s position “that sensations without concepts are barren, and concepts without sensations are empty” pushed her toward a greater discovery of how her thoughts were connected with physical senses (Keller, 1929, pp. 12-14). As a Latin scholar at Radcliffe, one of the first books that Keller was fortunate to obtain in Braille was Lucretius’s (2001) On the Nature of Things—a work that greatly impressed her. “Lucretius’s philosophical poem,” she later observed, presented “a startling close approach to our atomic age” (Keller, 1955, p. 96). Epicurean philosophy, of which Lucretius’s poem is one of the main extant works, asserts that the foundation of our knowledge lies in the senses. As Lucretius wrote (in prose translation),

The fact is that each sense has its own special sphere, its own separate function. Thus the discernment of softness, cold and heat must be the province of one particular sense, while the perception of the various colors and everything connected with colors must be the business of another. Taste too has its own distinct function; smell is produced separately, and so is sound. It necessarily follows that one sense cannot refute another. . . . All senses at all times are true. (pp. 113-14)

According to Epicurus, perceptions obtained through the senses required “confirmation” through closer examination. A person perceiving a tower from the dis-
tance could be deceived as to its shape. Touch, which generally required proximity, was therefore not essentially inferior to other senses, such as sight and hearing. Keller’s knowledge of Lucretius (and undoubtedly Diogenes Laertius’s history of ancient philosophy from which much of our knowledge of Epicurus arises) clearly influenced her own philosophy of the senses. The idea that “one sense cannot refute another” undoubtedly grounded and gave her confidence in her own sense perceptions of the world. Karl Marx, who was the most penetrating scholar of Epicurean materialism in the 19th century, took the stance that the essence of a humanistic materialism/naturalism was a worldview that started with the senses and that went on to insist “that there cannot be any philosophy at variance with the healthy human senses and reason based on them” (Marx & Engels, 1975, p. 129).

In Keller’s articulation of the basis of knowledge, she proposed that the human experience of nature is founded on the material world, which passes through the senses. In this, she unified the mind and body, as they interacted dialectically with the physical world. Thus, it is through the senses and the reason based on them that humans relate to nature. Her trust in the knowledge offered by her three senses—touch, smell, and taste—that guided her “many excursions into the borderland of experience” offered a powerful lesson for all of those who had grown accustomed to thinking primarily in terms of the other two (see “The Power of Touch” from The World I Live In below) (Keller 1903/1910). Nevertheless, in the same chapter from The World I Live In, Keller wrote—in an attempt to ward off potential criticisms—of the “imperfections and deceptivity” of her senses (and indeed of the senses in general), departing from the bolder Epicurean view of the reliability of the senses (but not all of our mental perceptions based on them).

In response to those who contended that all sensations of the world pass through the eye and ear, Keller (1902/1905) declared,

My whole body is alive to the conditions about me. The rumble and roar of the city smite the nerves of my face, and I feel the ceaseless tramp of an unseen multitude, and the dissonant tumult frets my spirit. (pp. 123-124)

In The World I Live In, Keller (1903/1910) revealed how our senses connect us to nature, providing the foundation for understanding life and the world. In the chapter “The Five-Sensed World,” she emphasized that knowledge is a construction, based on the interaction of the senses with the physical world (pp. 87-88). Nature is not devoid of life but is vibrant and filled with changes. Thus, life in all its forms is contingent and knowledge is never complete. In “Analogies in Sense Perception,” Keller illuminated how she used her knowledge of the world to construct associations between material objects, colors, and concepts to attach meaning to the sensations she perceived. In doing this, she illustrated her awareness of variations in nature, by referring to her knowledge of differences in the smells of particular types of roses. By way of asserting her knowledge of the real world, she mentioned that

the sun does not shine for my physical eyes, nor does the lightning flash, nor do the trees turn green in the spring; but they have not therefore ceased to exist, any more than the landscape is annihilated when you turn your back on it. (pp. 104-105)

In “The Power of Touch,” Keller confronted critics who denied her the right to speak of the beauty of mountains, birds, and the sky by stating, “They declare that the very sensations we have from the sense of touch are ‘vicarious,’ as though our
friends felt the sun for us! They deny a priori what they have not seen and I have felt” (p. 40).

Keller found refuge in the countryside. In comparison to the irregular vibrations of the city, the soothing vibrations of the natural world provided comfort, relief, and inspiration for Keller. She observed,

How noiseless and undisturbing are the demolition, the repairs and the alterations, of nature! With no sound of hammer or saw or stone severed from stone, but a music of rustles and ripe thumps on the grass come the fluttering leaves and yellow fruits which the wind tumbles all day from the branches. Silently all droops, all withers, all is poured back into the earth that it may recreate; all sleeps while the busy architects of day and night ply their silent work elsewhere. The same serenity reigns when all at once the soil yields up a newly wrought creation. Softly the ocean of grass, moss, and flowers rolls surge upon surge across the earth. Curtains of foliage drape the bare branches. Great trees make ready in their sturdy hearts to receive again birds which occupy their spacious chambers to the south and west. . . . The meadow brook undoes its icy fetters with rippling notes, gurgles, and runs free. And all this is wrought in less than two months to the music of nature’s orchestra, in the midst of balmy incense.

The thousand soft voices of the earth have truly found their way to me—the small rustle in tufts of grass, the silvery swish of leaves, the buzz of insects, the hum of bees in blossoms I have plucked, the flutter of a bird’s wings after his bath, and the slender rippling vibration of water running over pebbles. Once having been felt, these loved voices rustle, buzz, hum, flutter, and ripple in my thought forever, an undying part of happy memories. (Keller, 1903/1910, pp. 58-60)

Keller’s perception of changes and natural processes resounds in her words. Keller (1929) held that “all of us need to go often into the woods alone and sit in silence at the feet of Nature” (p. 309). It was these direct experiences, interacting with nature, along with her philosophical insights, that inspired and informed Keller to write The World I Live In (pp. 34-35). Her senses provided a means to take in the natural world:

The sweet voices of the earth reach me through other avenues than hearing and sight. When I am in the woods I love to put out my hand and catch the rustling tread of small creatures in the leaves.

I love to follow dark roads that smell of moss and wet grasses, hill roads and deep valley roads so narrow that the trees and bushes touch me as I pass.

I love to stand on a little bridge and feel the brook flowing under it with minnows in her hands.

I love to sit on a fallen tree so long that the shy wood-things forget it may be imprudent to step on my toes, and the dimpling cascade throws waterspray in my face. With body still and observant, I hear myriad sounds that I understand—leaf sounds, grass sounds, and twigs creaking faintly when birds alight on them, and grass swaying when insects’ wings brush it, and the thistle’s silvery flutter. These sounds I hear, yet my way is still. (pp. 311-312)

In addition to touch, Keller (1903/1910) provided a moving account of smell as she wrote about the sense of loss she experienced through the clearing of woods:

The other day I went to walk toward a familiar wood. Suddenly a disturbing odor made me pause in dismay. Then followed a peculiar, measured jar, followed by dull, heavy thunder. I understood the odor and the jar only too well. The trees were
being cut down. We climbed the stone wall to the left. It borders the wood which I have loved so long that it seems to be my peculiar possession. But to-day an unfa-
miliar rush of air and an unwonted outburst of sun told me that my tree friends were gone. The place was empty, like a deserted dwelling. I stretched out my hand. Where once stood the steadfast pines, great, beautiful, sweet, my hand touched raw, moist stumps. All about lay broken branches, like the antlers of stricken deer. The fragrant, piled-up sawdust swirled and tumbled about me. An unreasoning resentment flashed through me at this ruthless destruction of the beauty that I love. But there is no anger, no resentment in nature. The air is equally charged with the odors of life and of destruction, for death equally with growth forever ministers to all-conquering life. The sun shines as ever, and the winds riot through the newly opened spaces. I know that a new forest will spring where the old one stood, as beautiful, as beneficent. (pp. 69-71)

Keller’s account reveals her awareness of how clearing the forest radically changes and destroys the habitat for the animals within the woods. Furthermore, she associated the scattered branches with death. Nature is not imbued with human emotions, but in its whole changes have occurred. Although Keller did not explore the long-term consequences of clearing the forest, her account does not exclude this possibility. At this point, she remained optimistic that a new forest would return to cover the newly cleared land.

Keller believed that people had the potential and ability to change history, which includes society as well as human interactions with nature. Although an optimist, she warned that “there is a dangerous optimism of ignorance and indifference,” which takes “refuge from the evils of the world in skyey dreams of good . . . while millions of their fellowmen were bartered and sold like cattle!” (Keller, 1903, pp. 15-16). She criticized the development of a blind optimism that allowed people to hide behind self-declarations of being “the greatest nation on earth,” while ignoring the grievances of the rest of the world (Keller, 1903, pp. 15-16). Given the potential of human society to alter the natural world, it is necessary to consider the economic and social forces operating throughout the world. Keller contended that labor, consisting of the productive use of our creative energies, was a primary source of change for humans (Keller, 1903, p. 20). Through labor, people re-create themselves and the world. From this position, work becomes a necessary and useful means for the development of the human species. She embraced the socialist thesis that capitalism prevents this course of action by organizing productive labor for the accumulation of wealth, rather than social needs (Keller, 1967, p. 41). Thus, exploitation colors human interactions at work.

Keller’s commitment to these ideas developed through her experiences, education, and personal relationships. Although early on in her life she had believed everyone could overcome obstacles with enough motivation and effort, over the years of visiting mill towns, packing towns, and urban enclaves of poverty, she noted that she had

forgot that I owed my success partly to the advantages of my birth and environ-
ment, and largely to the helpfulness of others. . . . Now . . . I learned that the power
to rise in the world is not within the reach of everyone, and that opportunity comes with education, family connections, and the influence of friends. (Keller, 1929, p. 157)

With this thought in mind, Keller devoted her life to helping organize and mobilize a social movement to correct the social ills of her time.
Keller undertook an extensive reading of Marx, Engels, Kautsky, and William Morris to develop a better understanding of the exploitation and greed within the economic and social system. In 1909, she joined the Socialist Party (Foner, 1967, p. 12). Journalists around the United States responded by trying to discredit Keller, by claiming that she was susceptible to the opinions of her friends due to her blindness and deafness. But she asserted that these same people, previously, acclaimed her intelligence and believed that she had overcome her disabilities. As a retort, Keller (1967) wrote, “It may be that deafness and blindness incline one toward socialism. Marx was probably stone deaf and William Morris was blind. Morris painted his pictures by the sense of touch and designed wall paper by the sense of smell” (p. 26).

For Keller, the capitalist system forced poverty on people, degrading their health, polluting the city, and shortening children’s lives. Labor provided the wealth of society, yet received little in return. She contended that through their labor, workers

built great cities, and they cannot be sure of a roof over their heads. With their hands they have opened mines and dragged forth with the strength of their bodies the buried sunshine of dead forests, and they are cold. They have gone down into the bowels of the earth for diamonds and gold, and they haggle for a loaf of bread. With their hands they erect temple and palace, and their habitation is a crowded room in a tenement. They plow and sow and fill our hands with flowers while their own hands are full of husks. (Keller, 1967, p. 43)

Furthermore, Keller (1929) lamented that capitalists exploited even the children:

You took little children out of their cradles, out of the sun and dewy grass, away from play and their toys, and huddled them between dark walls of brick and cement to work for a wage, for their bread. For their heart-hunger you gave them dust to eat, and for their labour you filled their little hands with ashes! (p. 332)

In support of labor struggles around the world, Keller joined the Wobblies, hoping to push forward a unified socialist labor movement to bring about worker-controlled production and better working conditions (Keller, 1967, pp. 91-93). Increasingly, Keller’s studies of blindness led her to an analysis of the social causes of blindness, which stemmed from “ignorance, poverty and the unconscious cruelty of our commercial society” (Keller, 1967, pp. 29-30). She discovered that blindness tended to be concentrated among the poor rather than randomly distributed among the population. Keller recognized several social factors causing blindness—the poverty and unsanitary housing conditions produced by a system that denied people decent paying jobs; failure of employers to provide safety regulations for workers, causing accidents that resulted in the loss of vision; and poor lighting at factories, which strained workers’ eyes, causing the deterioration of their eyesight. To root out the cause of these situations requires the transformation of the economic system. Thus, she believed in organizing for a socialist future. She felt sure love would

bring everything right in the end, but I cannot help sympathizing with the oppressed who feel driven to use force to gain the rights that belong to them. . . . People turn to revolution only when every other dream has faded into the dimness of sorrow. (Keller, 1929, p. 334)
Although Keller supported revolutionary changes in society, she was an active social reformer and social advocate for a wide range of issues. In regards to blindness, she advocated the practice of giving babies, immediately after birth, a few drops of nitrate of silver in each eye to destroy the germs that may be contracted during birth, due to venereal disease, that can cause blindness (Keller, 1905/1930, pp. 160-172).

During World War I, Keller stood with Eugene Debs and Emma Goldman against militarism, recognizing that “the few who profit from the labor of the masses want to organize the workers into an army which will protect the interests of the capitalists” (Keller, 1967, p. 75). Three years after the bombing of Hiroshima and Nagasaki at the close of World War II, Keller visited Japan, witnessing the destruction that remained (Herrmann, 1998, pp. 293-295). Her belief in the necessity of peace was reaffirmed, and she became determined to fight against atomic warfare. Along with Einstein, Keller fought for the protection of people’s political freedoms within the United States. Both of them signed a proposal demanding the end of the Dies Committee and the House of Un-American Activities Committee (Herrmann, 1998, p. 282).

The material world, which Keller perceived through her senses, included the social and natural world. Like mind and body, the social and natural worlds are not separate. It is in Keller’s discussion of the senses as the key to nature and knowledge that she made a vital contribution to ecological thought. Through the senses, humans receive inputs from the material world, which are used as a reference to nature. In other words, our experience of nature and our knowledge of life are mediated by our senses. The world outside becomes the world within.

REFERENCES


