Sensory Design and Garden Environments for Adolescents with Sensory Impairment

All people use a set of senses to find, understand, remember, and organize the clarity of place, regardless of the intensity or number of senses they have. So, why is it then that sight has become the most important? “What if we designed for all senses? Suppose for a moment, that sound, touch, and odor were treated as the equals of sight, and that emotion was as important as cognition?” (Malnar and Vodvarka, ix). For children and youth living with singular or dual sensory impairment, the experience of texture, smells, temperature, and vibrations are amplified to make up for what is missing. Design for human experience must seek to enhance the engagement of all senses, regardless if we might be missing a one or two. “Comprehension relies on sensory data filtered through memory, and delight is enhanced by a degree of mystery.” (Malnar and Vodvarka, 21). Our senses belong to the place. Those with sensory impairment rely on other senses in their use to move and understand the world in the same ways that normative sensory people do. Children and adolescents, although missing sight or hearing, are apt to give a stronger meaning to those senses in which they can receive information. This “Intersensory Coordination” is the sharing of information from one sense that can be understood by relating it to another piece of sensory data (Holbrook, 89). Helen Keller describes her own understanding. “In my classification of the senses, smell is a little the ear’s inferior, and touch is a great deal the eye’s superior.” (Malnar and Vodvarka, 152). William James stated, “the emotional brain-processes not only resemble the ordinary sensorial-brain processes, but in very truth are nothing but such processes variously combined.” (Malnar and Vodvarka, 59). By heightening normative sensory experiences both those with impairments and those without, are able to increase their knowledge of self and place. Our strongest memories of youth are often in garden environments. Whether interior or completely wild, the growing spaces of the world that we hold in our memory are filled with sensory stimulation. The brisk wind, odors of earth, and whistling branches of early grey spring are complete spatial moments. What nature gives us in experience is matched by what we can do together in carefully designed garden environments. Enriching spaces can be filled with edible and productive vegetation. Adolescents with dual sensory impairment can be encouraged to care for and take part in the cycle of natural energy systems while improving their mental stimulation and developing physical and nutritional health. Exposure to and adventure in the outdoors with nature exponentially increase the understanding, common sense, physical aptitude, and acceptance for life processes and adversity. Nature allows us to define our own importance and role in our world. Children with sensory impairment should be allowed to experience their natural environment by exploration and natural play opportunities. In this way, the child can “learn to use sights, smells, sounds, surface changes, and textures to serve as cues” for danger or comfort, to help make decisions and guide themselves safely through space (Holbrook, 99).