The following essays about the design of a Garden for the Blind south of Hume Hall were written by University of Florida Honors students as part of Dr. Miriam Zach's honors course IDH 3931, Spring 2005.

Some of the students preferred to remain anonymous. Therefore names of the authors are not included. If you prefer to read the documents in Adobe Acrobat, please download the files HERE.

Essay 1

Garden for the Blind

I love the idea of creating a garden for the blind. Blindness is something I have given a lot of thought, as I have Glaucoma, an eye disease that untreated leads to blindness. Doctors said that had I not been diagnosed, I would have been blind by the age of ten. Luckily, in my case, they did catch it and I am able to see. Being so close to losing my sight has made me think very seriously about life as a blind person; and I often try to do everyday things with my eyes closed, such as getting ready for bed and playing the piano, to see how much of an adjustment I would have to make. The first thing that I notice when I try to do something with my eyes closed, is the immediate need for touch. Although the other three senses, audio, olfactory, and taste are also important and I plan to incorporate them into my garden as well, however, my main focus will be on the sense of touch.

To begin with, the area designated for the garden is fairly steep, therefore it is necessary to decide how to set the path through the garden. Our class trip to the Butterfly Rain forest, and being able to go through blindfolded, was a great resource for ideas on creating this garden, particularly with the need to create an environment that is easy to navigate without sight. Stairs provide obvious difficulty for a garden for the blind, therefore, I have decided to use sloping ground, which although more expensive, would be safer and an easier environment to navigate. Also, as an additional benefit, the garden would be wheelchair accessible. To line the garden path, either a natural pressed dirt ground, or a highly durable short sod ground could work, both of which are natural options. However, recycled tires, much like the surface of nice running track surfaces, would make an easier to maintain surface, that incorporates recycled materials and gives more of a response to the act of walking by adding an extra bounce (in addition to being even more wheel chair friendly than the previous two natural options).

The main focus of the garden that I think would create an extraordinary environment, unlike anything else existing, would be the incorporation of marble statues periodically along the path that visitors to the garden would be encouraged to touch. I got this idea from a trip I took to a town in Colorado called Marble, where they mined marble. At a local gallery one of the artists kept encouraging everyone to feel his sculptures, and everyone was amazed at how seemingly soft they felt. Marble, especially sculpted marble, has an extremely smooth feel, and also is unusually cool to the touch. The sculptures would obviously be durable enough to endure the environment, and would present art that would appeal to the touch perhaps even more than it would appeal to sight. In order to contrast the cold, hard marble, I suggest lining the path with velvet covered hand rails; preferably a dark color velvet, such as black, so the rails would become warm in the sun and contrast the cool statues further. The rails would also be practical for navigating through the garden and providing new visitors with a sense of independence for navigating the garden on their own. It would also be engaging to incorporate plaques in the garden either next to each of the statues or periodically as desired, each with an inscription of poetry or something of that nature with both a printed text and the same text translated into braille.

The path should wind down and around, curving to both maximize the space available and to avoid steep slopes. The path ultimately should lead to a wooden amphitheater, rounded off and facing the garden. Several benches could be placed facing the amphitheater and the space would become one
designed for the auditory sense. The space could double on occasions or for events and performances from musicians or students.

The plants in the garden obviously would be another big focus. Plants should be divided up into categories, especially scented plants, so they would not overpower each other, and each section of the garden would have a different distinct fragrance. Obviously the different sections could differ as desired but heavily fragranced flowering plants, such as gardenias, lilacs, lavender, etc. would be nice toward the beginning of the path, to give the sense of a traditional flower garden. Then as the path progresses, smaller sections, such as an herb garden, and fruit plants such as citrus, blueberry, or banana plants would not only engage scent, but also allows the ability to taste, which would have to be monitored, but should be encouraged to involve all of the senses other than sight.

The sound pollution of Museum Road would effect the serenity of the location, therefore it would also be nice to incorporate fountains or other natural noise distractors of that nature to take back the focus from the disturbance of the road, and refocus it on things in closer proximity, inside the actual garden.
PROPOSED DESIGN FOR A GARDEN FOR THE BLIND

As a largely visually-reliant society, much of botanical garden design have focused primarily on visual presentation, whether in flower color or in garden composition. Slowly, however, sensory gardens appealing to our more underutilized senses of smell, sound, touch, and even taste are appearing around the country and the globe. While these unique parks may specifically have blind individuals in mind, sensory gardens also appeal to anyone in the general population who would like to expand their sensory horizons. The following is just one proposal for a sensory garden design:

The entrance to the garden should be visually, nasally, and tactically stimulating. A metal gate covered with entangled goldflame honeysuckle vines (Lonicera x heckrottii ) would serve as a colorful, aromatic greeting and give visitors a small taste of the experience to come. These perennial plants also attract hummingbirds and butterflies, whose activities would surely stimulate the ears. The general layout of the garden would include a continuous serpentine path lined with raised plant beds (to minimize stooping and bending) on both sides. The path can even wrap around a standing rectangular planter to maximize usable area. The path would also have several alcoves or nooks, which would give visitors a resting area where they could linger about, smelling flowers and feeling leaf textures. Park benches present throughout the garden to serve as directional guides. A change in material texture (to a metal, for instance) could be used to indicate an alcove area. Metal plaques in Braille embedded in the edges of the concretalcoves would provide general information about the various plants. These plaques can also have buttons that can be pushed for an audio reading of the inscription.

According to the book Sensory Design, uneven pathways heighten our awareness of surfaces by compelling us to use our kinesthetic sense to perceive the changes in the ground. For the disabled, a slow-sloping path (upward and downward) would engage the visitor in using this sensory system. To indicate a resting area in an alcove, the ground surface should change in material as well as in slope (specifically, to a flat, even surface). These small cues would subtly inform blind visitors that they are free to stop at particular spots and let their sensory systems absorb the surroundings.

An interesting feature of the sensory garden would be a concrete alcove almost submerged in a pond. The water surface should reach a maximum height of approximately six inches below the edge of the alcove so that visitors can reach in and touch the water. Water lilies and other aquatic plants would be perfect for tactile exploration. A small rock waterfall facing the visitors can even provide auditory stimulation. The alcoves should cover a large enough area to accommodate multiple disabled and non-disabled visitors.

As the blind rely largely on sound cues as a navigational tool, different sources of sound must be present throughout the sensory garden. A prominent waterfall in the center would provide blind visitors with a continually streaming audio signal that would help them orient themselves. A few wind chimes of different low to middle frequencies in different sections of the garden would also help visitors to distinguish among its various parts as well as aid in their navigation.

Plants themselves can also create sounds that evoke subtle moods in visitors. Weeping trees, such as willows and birch for instance, have a calming whisper. Quaking aspen trees (Populus tremuloides), so named for the rustling sound of its leaves, would be another source of audio stimulation. One to three of each around the perimeter with significant space in between may be best, so as to function as distinct way-finding cues. The park benches would work great under these trees. (The haptic system would also be stimulated here as visitors distinguish between sunlight and shade.)
To stimulate visitors' sense of touch, the sensory garden would house a variety of textured plants. Especially chosen for their distinctive feel would be the 'lamb's ears' (Stachys byzantina), which have velvety, gray leaves favoring its namesake. Irises, liriope, nandinas, and philodendron should also line the edges of alcoves for quick access. Varieties of ferns differ in composition, including the Southern maidenhair fern, Boston fern, and the holly fern which has a fine, glossy texture. The crepe myrtle tree, with its smooth, exfoliating bark, should also be tactilley stimulating. A small park bench under this tree would be ideal.

While the blind can detect a myriad of different sounds and textures in the garden, it is perhaps their olfactory systems that will most frequently be excited. Seating areas can be enhanced by the floral overtones of gardenias, scented geraniums, flowering tuberose, varieties of lilies, gardenia, roses, and jasmine. Another alcove can display a set of spicy-fruity scented plants, including magnolias (with their strong, lemony scent), daphne, Korean spice viburnum, and garden phlox. Spicebush, sage, chamomile and Carolina allspice have earthy scents, which most people find appealing.

With their sweet fragrances, lilac shrubs would certainly please the visitors' olfactory system as they follow the garden path. If possible, the lilacs would complement flowering crabapple trees quite well (it also has a sweet scent). Shrubs of red magnolia (also known as Florida Anise) can also line both sides of a small, un-railed section of the path. This plant has smooth, glossy foliage which emits an aromatic scent when bruised; it also tastes like licorice. Oleander shrubs are another fragrant plant, emitting a slightly fruity smell, which can line the garden path.

A trellis with a climbing sweet pea vine (Lathyrus odoratus) would be a perfect addition during the spring. Its vibrant blue, rose, and lavender blooms carry a fragrant scent that would surely stimulate anyoneís nose. The scented trellis could serve as a fragrant divider between two alcoves. Chilean Jasmine, with its gardenia-like scent, can also be trained to climb a trellis.

An herb section would be a great addition to the sensory garden. Naturally, basil, oregano, rosemary, tarragon, sage, parsley, and thyme would be included. Various plants of the mint (Mentha) genus, including the licorice mint, bergamot mint (has a citrus scent), chocolate mint, peppermint, pineapple mint, spearmint, apple mint, and others would surely entice visitors. Though not exactly an herb, the flowering onion (Allium rosenbachianum), which bears small, star-shaped, dark-violet flowers in loose, ball-like heads in summer and has a mild oniony scent, would complement the culinary scents of this herb section. Most, if not all, of these herbs are also edible. Thus, with proper care of the herbs, visitors can taste the wide range of flavors of plants long used by Native Americans and others for medicinal purposes.

After weaving through the winding paths of the sensory garden, visitors can exit through a gate adjacent to the entrance. This exit gate should have the same honeysuckle vine on it to hark back to their first arrival at the sensory garden.
The research and preparation for this essay have made me realize not only how interesting and unique this project is, but also how useful and valuable such a Garden for the Blind could really be. The blindfolded Butterfly Garden experience specifically helped me realize to a great extent how much we as humans greatly overemphasize our sense of sight, and do not take full advantage of all the senses most of us have been blessed with to use and appreciate. Just as the restaurant Dans le Noir? is not restricted to only the blind, I believe this Garden for the Blind should be for everyone to enjoy and experience. Perhaps those patrons who are gifted with sight could do as we did at the Butterfly Garden and close their eyes, wear sunglasses, put on blindfolds, or whatever means of covering their eyes so that they could truly feel the impact of the garden’s beauty without relying on merely the sense of sight. Joy Malnar and Frank Vodvarka’s Sensory Design helped accustom me to the idea that our other senses are just as important, but vastly underused, when compared with the sense of sight. The architecturally-focused book’s brief section on gardens and emphasis on non-ocular senses helped me start thinking in the proper frame of mind for this garden’s design. Richard Florida’s The Rise of the Creative Class was able to aid in my creative thinking processes, and proved very helpful thanks to the revelation that creativity is not a gift that only some people are blessed with, but rather a frame of mind that anyone who works hard enough can attain and master for some creative purpose. All of these various sources helped provide me with the right mindset and creative energy in order to come up with the ideas and thoughts about the Garden for the Blind I am about to describe.

A continuing theme that one cannot avoid when considering developing anything geared specifically toward the blind is that all visual, sight-based elements are useless. However, this is not to say that the designer is greatly limited or handicapped. The wealth of possibilities that exist through taking advantage of all our other, non-exploited senses is endless. The notion from Sensory Design that all of our senses are not being used to their fullest potential is echoed by the “project history” page of Dans le Noir’s website. It states that “Our sense seems to be very badly used.” The question mark at the end of the groundbreaking restaurant’s name could not be more fitting. The awakening of all our other senses shows us that we may not really be in the dark at all, given the whole new world of senses that we can now fully perceive and truly appreciate. Thus, it is with this goal in mind that I hope we are able to create a garden that is not only well suited for those whose range of sensory perception does not include eyesight, but that is also an awakening experience for those who have been blessed with the fullest extent of the senses and have yet to maximize them.

The winding, uneven path of the Butterfly Garden, combined with the quotes from Moore, Mitchell, and Turnbull about gardens from Malnar and Vodvarka’s Sensory Design, which described great gardens as “unfolding like a narrative or a piece of music—carefully choreographed—sequential,” has led me to conclude that our Garden for the Blind should be along a winding pathway, incorporating haptic senses and not merely following a straight-line path or being contained to one enclosed area (Malnar and Vodvarka, 104). Moore, Mitchell, and Turnbull also mention the idea of a lake or pond in the center of the garden, which leads me to believe that the garden should have a small pond with a miniature stream leading into this body of water in the midst of our garden (Malnar and Vodvarka, 104). I realize that we are limited by the constraints of the size of the yard behind Hume Hall and funds for creating the garden, so this body of water and the path and garden that surround it could obviously not be too extravagant in size or intricate in detail. Malnar and Vodvarka note, “variations in level, position, and surface of path compel us to pay attention when walking,” as well as point out that our senses are at their finest when uneven pathways are present, forcing the brain to operate in such a way that we are most sensitive to our surroundings (104). These elements would be incorporated into the garden, as well as an extended entryway composed of gravel and stepping stones, borrowing an idea from Japanese teahouses (Malnar and Vodvarka, 105). The garden would include a railing around the edges of the pathway in order to provide something for those visitors, blind and sighted, who wish to appreciate the full beauty of the

Essay 3

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garden without their vision, but at the same time having something to grasp onto to keep their balance. The garden would also include shallow, smoothly inclined steps, because, as Templar notes in Sensory Design, "stairs engage the user's motions and senses to a remarkable degree" (Malnar and Vodvarka, 147).

Since, as Malnar and Vodvarka point out from Michael Southworth's study on sound, the blind intend to be more than usually sensitive to sound, and prefer low to middle frequency and intensity sounds (disliking any rushing or roaring noise), the small stream in the middle of the garden should provide an ample source of quiet and pleasant sound without being too overbearing (131). As Trygg Engen points out in Sensory Design, "a continual arousal of the senses is important for sensory memory, so the garden should have a variety of different flowers that are constantly being presented to the visitor, but not in such a way that the fragrances are too overbearing" (Malnar and Vodvarka, 133). As J. Douglas Porteous also points out in Malnar and Vodvarka's Sensory Design, "smellscape is non-continuous" limited by nose height from the ground, so the garden's flowers will be continuous and at a height close to nose level so that the garden's patrons can readily smell the fragrances being presented (137). As for the actual flowers themselves, I cannot profess to be an expert, but I shall include a few from the list we have been provided for a general outline. As Florida points out in The Rise of the Creative Class, creativity is a 4-step process, and I believe we are currently only scratching the surface of the preparation phase, not nearly ready for incubation, illumination, or verification yet. Regarding the actual flowers, I would tend to agree that thorny or rough to touch plants, as well as those with poisonous juices and secretions, should be avoided at all costs. Regarding plants known for sensitivity to touch, I believe it would be nice to include crepe myrtles, ferns, magnolias, and weeping willow trees, to name a few. For flowers known to be extremely fragrant, I would recommend alyssum, also recognized for its texture, citrus trees, herbs, licorice plants, marigolds, and tea olives. This list is nowhere near complete or as detailed or substantive as would be necessary to create the actual garden, but hopefully through collaboration with Dr. Muecke's architecture students and our continued hard work at designing this garden, we will be able to create a unique and dynamic experience for all, those with sight and without it.
Garden for the Blind

Some great gardens unfold like a narrative or a piece of music as we move through them and view their carefully choreographed wonders. To really know why San Francisco is not Paris you must sense it. These words, quoted by Moore, Mitchell and Turnbull and Malnar and Vodvarka respectively (in Sensory Design), are what inspired me to create not only a garden for the blind, but a sense of place and feeling for those lacking sight. While reading the selected excerpts from both Sensory Design and The Rise of the Creative Class I realized that there is more to designing a garden for the blind than simply selecting plants with specific textures and scents; it is creating an entire place, a gestalt of the senses if you will, that creates a whole sense of being in the garden. Florida refers to creativity as the process of destroying ones gestalt in favor of a better one. My ideal garden for the blind creates a gestalt without a visual field. Using the kinesthetic sense of the distinctive land behind Hume, along with carefully selected auditory, olfactory, and tactile experiences, the garden for the blind will create a gestalt of its own, where even a seeing person feels they no longer need their sight.

I want to appeal to the senses, but not overwhelm them. This is why I decided to divide the garden almost into sections. The only predominate sense not divided at all will be sound. Ideally, in the center of the garden will be beautiful statue, with many curves and crevices, that also has running water (a bird bath would be perfect). While this might not work on the slopping land behind Hume, hopefully at least a small structure will be feasible and provide something else for the hands to explore as well as the constant, pleasing sound of running water. When walking through the butterfly rainforest with my eyes closed, my favorite part was when I was near water. The sound of water truly made me feel like I was in a nature scene; it also gave me a sense of direction and was remarkably soothing in a somewhat stressful situation (I do not normally walk through unfamiliar areas with my eyes closed). The sound of water is a must for my garden.

Also providing sound, I want to attract birds. I read that Bee Balm is an excellent attractor of hummingbirds and butterflies (which I learned from the butterfly rainforest can create quite a sensation when they land on you). I have not read that this flower actually attracts bees, but if it does we would certainly want to stay away! The sound of birds will definately increase the auditory experience, however, and I know the sensation of a butterfly flying right by me gave me goose bumps at the butterfly rainforest; a sensation felt throughout the entire body.

As for the specific plants, their purpose will mainly be to provide tactile and olfactory pleasure. I will start with the softer plants, to be gentle to the exploring hand, and have a couple different plants to give the hand something new to explore, but still make them progress through the textures slowly. At the beginning on the right (I am picturing a winding path through the center, optimal for the slopped terrain) I will have some alyssums which are soft and described to have a sweet, fresh and relaxing smell. On the left I will have some lamb’s ear, an incredibly soft plant as well, but not as fragrant (I don’t want the fragrances to mix). Another way to arrange this would be to have both plants on both the left and right. I will then progress into the harder textures. I would probably start with something like the philodendron, with the split leaves serving almost as a warning of the change to come. Then I will include some podocarpus shrub and weeping ilex. You could split these up on the left and right, but I think I will mix them to create a true tactile adventure. As the staple of this section, I want to include a citrus tree. Its main purpose will be the overwhelming citrus smell, but the bark will add to this section of the garden as well.

After these rough textures, for the end of the garden trail I will have to end with another soft plant. I think I will end with a licorice plant; a soft texture with a sharp and defined scent that is not only poignant, but also brings positive associations for many people. One deep breath near the licorice plant
can fill body with a complete sense of place at the end of the garden. It will not only be a sense of the licorice plant, but a sense of the feelings that come with its odor and warm texture, a truly pleasurable feeling to end on.

In Sensory Design Malnar and Vodvarka talk a lot about a kinesthetic and an overall feel. I think the overall feel of my garden will be the sense of a journey. With the sloping land behind Hume and the winding path, a visitor to my garden will have to walk slowly through the garden and really pay attention to where they are throughout the entire journey. The changing phases of texture and progressively stronger scents will allow for stronger and stronger feelings to build up in the visitor, and keep him wondering what comes next and anxious to explore every object. Complete with the sound, the visitor will not feel like they are in just any garden, but in a garden made with the kinesthetic, tactile, olfactory and auditory senses in mind. Like in the restaurant in Paris, no one will need their sense of sight to appreciate the garden. The clashing colors of the flowers would not matter and the reflecting sun off the water will not interrupt the experience. Any visitor to the garden will be able to feel through their experience that it is a garden for the blind.
Garden for the Blind

In Sensory Design by Joy Malnar and Frank Vodvarka, a great garden is said to unfold like a narrative, a journey or a piece of music. My hope is that the Garden for the Blind located on the land south of Hume Hall will be such a garden.

I think the Garden should be entered through the parking lot, since the ground there is the most level. I think there should be a wooden path with railings on both sides until the garden reaches its full width. The path should then change to asphalt or rock, but the wood railing should be continued for a few more feet. There could be an archway over the wooden path, wrapped in Jasmine vines, so that the entrance to the garden can be marked by such a smell.

The unrailed but broad path should then travel through the garden. Although unrailed, a system, such as raised edges, should be set in place on both sides of the path, to indicate where it ends and the grass begins. The path will eventually lead to a substantially large fountain in the middle of the Garden. One will know when he or she is in the heart of the Garden when one hears the water, or even feels the mist on his or her face. The fountain should have a ledge wide enough to sit on, with railings to keep one from falling in. The fountain will be in the middle of a paved circle. The circle will have railings around it, except for when it is met up by one of the three main paths: the path from the entrance, the path to the gazebo, and the path to the exit.

On the right side of the fountain (when facing it from the entrance) there will be a Gazebo. There will be steps leading up to the Gazebo, since it will be situated on the steep side of the hill. The Gazebo can be a center for various activities, such as eating, or just sitting in the shade. The roof should be made out of a material that will create a pleasant sound in case it begins to rain. I'm still trying to decide what material will be best, since a material, such as tin, that amplifies the rain should not be used, nor should a material that will completely muffle the sound. The Gazebo will also be a center for music. Here the blind will have the chance to play different types of instruments as the wind itself plays on the Gazebo's wind chimes.

In between the Gazebo and the exit (to be described later) will be a magnolia tree that can be smelled, touched, and sat under for shade.

If one decides to veer off the paths, they will encounter wonderful things. To the left of the fountain is the less steep part of the garden. Here there will be soft grass, trees, places to sit, and clusters of plants. These plants will be either on the ground or elevated, and will include plants with different textures and smells, such as lamb's ear, lavender, banana shrub, spearmint, basil, and snapdragon.

There should perhaps be additional paths than just the three main ones. These paths can move through the level part of the garden by the different stations of plants. They should be made of a third kind of material so one can tell if one is on the wooden path of the entrance, one of the main paths, or one of the remaining paths.

The Garden will have two different hedges, one from the entrance to the exit and one from the entrance to the Gazebo. The first hedge will be made of Tibouchina and then Gardenia plants. This Tibouchina will have a velvety texture, and will be a break from the jasmine smell before the smell and texture of the Gardenia is reached.

The second hedge will include perhaps both Tibouchina and Nandina. I'm not aware of a particular smell the Nandina has, but it will provide an interesting texture that will contrast the texture of the Tibouchina.
The third and final path will lead out of the garden and up the stairs toward Hume. A few feet before the stairs are reached the railing should begin again, to give support as one leaves. And so will end the journey.
One of the first actions needed in constructing a garden for the blind on the south lawn of Hume Hall is to construct a barrier on the northern end and eastern end surrounding the garden so as to block out any unwanted street noise. The wall would preferably be cement, with the sides facing Museum Road and North-South Drive unpainted so as to absorb as much sound as possible. However, the sides facing the garden should be painted so as to reflect the sounds of the garden back to its occupants. This wall may need to be as high as seven feet or larger, however high it needs to be in order to block as much external noise as possible.

When a person walks through this garden, the first sense that is triggered is the sense of sound, for the walkway is wooden at the beginning of the garden path. Since this garden is situated on a steep hillside, the walkway needs to be level and built up next to the hillside, with steps going down leading to the next level walkway. The garden path continues, winding back and forth to the bottom of the hill. The entrance to this garden is to the west of the north wall, and the first realization that one is in the garden is the aroma of the mints lining the edges of the walkway on the hillside. Wooden railings line either side of the walkway to help guide the visitor, and the person would be able to touch, smell, and even taste the different mint plants lining this area of the garden. The different mints would include chocolate mint, pineapple mint, spearmint, and peppermint.

The next area of the garden a person encounters is one that appeals to the active touch, for these plants have appealing textured bark and leaves. A person realizes that this next stage of the garden applies a different sense because the walkway changes to a brick path, which reflects a different sound to the person, whether he or she is tapping the path with a cane or simply listening to the sound of his or her own footsteps. The first plants found in this "texture" area are crape myrtle, which have smooth bark. These plants can be considered small trees or shrubs, and occupy some space, so the visitor can walk along the path, gently touching the leaves and bark until the next plant, the lamb's ear, reaches his or her fingers. This plant has velvety, soft leaves.

As the person continues walking, the pathway is wooden again, to signify that the sense to which the plants are appealing is the sense of smell. These plants are separated from the mints so the visitor can focus on one kind of odor at a time. These plants include allspice and society garlic. The society garlic can have a pungent, overwhelming odor, so the allspice is grown slightly away from it so its own unique scent is not overpowered.

By this time, the visitor has reached the other side of the hill, and in order to continue along the path, he or she must go down stairs. The first indication that stairs are being approached is the sound of a stone fountain with trickling water on the far side of the steps. This sound of trickling water grows louder as it is approached, so it acts as an initial warning. The next indication is that the railing changes from a wooden material to a metal material. This special metal railing only occurs down the length of the steps, and changes back to a wooden material once the person has climbed down all the steps. Another indication is that the steps are constructed of concrete, which has a distinct sound difference from a wooden walkway. After the descent is a small wooden ledge with a seat for resting.

Following the steps, the next level walkway is brick, suggesting that the plants have texture and please the haptic sense, or active touch. The first plant encountered is the podocarpus shrub, known for its leathery leaves with their parallel veins. After feeling these "strap-like" leaves, the visitor finds the wax myrtle, a medium sized tree with waxy berries and gently serrated leaves. These two plants, due to their size and expanse, dominate this level walkway, but eventually lead to the herbs.
Like the mints and spices, the herbs also align a wooden walkway. The herbs growing in this area include basil, thyme, oregano, and rosemary, which blend together to form an interesting aroma that appeals to both the smell receptors and the taste receptors. While exploring the different herbs, the visitor can hear a fountain nearby, implying that another set of stairs lies ahead. Again, as the person approaches the stairs, the walkway becomes cement, and the railing changes to a metal material. After the descent down the steps, the walkway becomes brick again.

As the person walks along the next level path, he or she comes upon alyssum, a plant that sits low to the ground and has soft textured leaves and fragrant flowers. As a person passes this plant, he or she discovers that the walkway changes to wood again, and a floral fragrance can be detected. Further investigation concludes that the fragrances come from marigolds, jasmine, snapdragon (yellow rocket?), and gardenias, which grow all down the length of the path. When the visitor passes the gardenias, the walkway changes to brick, for magnolias, which are textured plants, line the pathway. Again, a fountain warns the presence of stairs, and the visitor must carefully move down the steps to reach the final walkway.

This final brick walkway leads to a wooden covered area surrounded by ivy. This structure provides a moist, shady environment for the maidenhair fern, which marks the end of the garden path. This covered area has a bench, which is for resting, listening, or for feeling the texture of the ferns. From here, the exit of the garden leads to the parking lot and North-South Drive.
Richard Florida's *The Rise of the Creative Class* gives a very interesting look into the science behind creativity and a thorough understanding of the creative process. According to Florida, creativity is a cognitive ability separate from other mental functions and all aspects related to intelligence. Creative potential does benefit from intelligence though but creativity is still a capacity inherent to all but in varying degrees for each person. Creativity requires self-assurance and the ability to take risks, however, because people utilizing creativity are usually going up against orthodox ideas about things and are challenging the norm and receiving a lot of criticism for these innovations. One must be sure of their self to maintain belief in their innovation through all this criticism and must be willing to take a risk in introducing their product of creativity to the market in the face of all this criticism. Florida claims there are four steps to the creative process. The first is preparation in which the person intently studies the task at hand getting a good grasp of the concept in their mind. The next step is incubation which is still a relatively unknown process of how this works in the mind but what is known is that one must consciously and subconsciously study the concept in their mind. The next step is illumination in which the person sees a new synthesis for this concept. The final step is verification or revision which include all work after the illumination step. I found it interesting that creativity is largely based on experiences and creativity favors people with an intellect with diverse experiences and perspectives because of this. This is because creativity requires the synthesis of different perspectives to create something new and useful. I also found it interesting that many highly creative environments in the past such as China and the Islamic world have died out because of social and economic conditions and these places now are not thought of as creative and intellectual centers anymore. I also found the concept of New Growth Theory to be very interesting in that it is essentially the empowerment of every person through the power of ideas and intellectual property although this theory seems slightly optimistic when it is compared to Karl Marx's goal of the proletariat overthrowing the upper classes.

For the objective of our class in creating a garden for the blind I found the book *Sensory Design* by Joy Malnar and Frank Vodvarka to have more pertinent information than Florida's book did. Florida's book explains how we'll actually go about creating the garden in our mind but Sensory Design seemed to explain some of the ways design can affect the senses which is very important for a garden for the blind since we will have to stimulate the other senses strongly since one of the primarily used senses in sensing gardens, vision, is nonexistent. We begin our section of reading with a part about the differences in spatial areas such as the tsunonouchi and the roji in Japan. I found it extremely interesting in that the tsunonouchi and roji are different in that the former is meant to be perceived while at rest and the latter is meant to be seen while moving. I am not sure what would go into the separation of designs between these two areas but this gave me the idea that the garden should be separated into areas for each sense to be used. The example of the Japanese garden also made me consider that for sound one of those structures in Japanese gardens that collects water and then tips pouring all the water out could be very useful for sound since otherwise there might not be much sound in the garden. Malnar and Vodvarka also point out to us that fragrances can have direct effects upon emotions, especially through the evocation of pleasant memories. According to this book lemon and peppermint increase alertness and energy while lavender and cedar reduce tension. I was also surprised to read in this book that while the short term memory of smells may be very poor, the long term memory of smells is very good.

Reading the Dans le Noir website at www.danslenoir.fr didn’t give me ideas as much as it helped me realize a main concern of this garden. If it is to be for the blind then they will have to be able to access it on their own if desired so there should be handrails throughout the garden for guidance and possibly a path from the main sidewalks at Hume with a handrail so they can find their way to and from the garden. I also saw somewhere on the website that people are not allowed to move without assistance from their waiter since that could cause problems for others there since things would be out of normal
For the overall garden design I believe that we should have a concrete path with handrail leading from the main sidewalks of Hume to the garden. The path for the garden should then be on a different surface than concrete to notify the blind of the change and also to keep them slightly more alert of their feet because of the slope of the ground behind Hume which could present problems if one is not properly orientated for walking at such an angle. All paths through the garden will have to have handrails as well. I thought it would also be good to divide up the garden into different areas stimulating senses such as haptic, gustation, and olfaction, since I believe these would be the main senses of stimulation from this garden. It is also possible that we could divide olfaction into different areas according to the effects of stimulation of these fragrances similar to Malnar and Vodvarka described with lemon, peppermint, lavender, and cedar. It might also be interesting to place Braille on handrail so that while guiding them self through the garden with the handrail they could also recognize what area they’re in and utilize those senses, such as in the gustation area which they would have to be notified it is acceptable to reach out and eat off of the plant in front of them. We could also use small signs with Braille and give general locations of each of the plants they’re observing to let them know where each is so they can reach for it and eat some of it.
If I were to sum up what I want to do with this garden in one word, it would be "awakening"—awakening of the senses other than that of sight. These senses include sense of smell, sense of touch, sense of taste, sense of sound, and also the kinesthetic sense (one's place in space). The garden will allow for complete awareness of one's surroundings and the plants present in the garden, although sight will not be used. The journey through the garden should be an enjoyable experience for those who want to emerge themselves in a world unlike the very physical one we live in to day. I find the concept of designing a garden for the blind to be very interesting. I began researching for the garden by viewing the website for the Dans le Noir restaurant in Paris, France. The room where one eats is in complete darkness and blinded staff members and waiters guide the restaurant goers throughout the restaurant. I want to do something similar to this in my garden in that there should be some people there to assist the blind as they walk through the garden if they would like assistance. However, the garden will not be in complete darkness. There will be light so that the blind can feel as if they are walking through a regular garden during the day and feel the sun and lights on them, but also for anyone else who would like to view the garden regularly or blindfolded. I want the garden to be able to be viewed in various ways by anyone who would like to do so. While researching for the garden, I did not find the book by Richard Florida titled The Rise of the Creative Class to be too helpful, except that it made me appreciate the creative abilities that are needed to complete a project such as creating a Garden for the Blind. However, I did find Sensory Design by Joy Malnar and Frank Vodvarka to be very useful. In the book, I found an interesting passage that I hope will characterize my garden when it is finished and people get a chance to view it. The passage says that "Some great gardens unfold like narrative or a piece of music as we move through them and view their carefully choreographed wonders" (Malnar and Vodvarka). I hope that the smell of the flowers and the touch of the plants will allow those who experience it to feel this type of enjoyment as they go through the garden. The book by Malnar and Vodvarka was also helpful to me because I learned a lot more about the senses, and their ranges, and the things in the environment that one can notice by using these senses. There are seven senses described in the book, which include the sense of touch, smell, vision, hearing, the haptic sense, and the kinesthetic sense (Malnar and Vodvarka). The senses that will be of particular importance to the blind is the kinesthetic sense, which allows them to know the position and movement of their body parts as they feel their way through the garden and touch the plants, as well as their haptic sense as they journey through the garden and feel the variations in the path as they enter the garden, walk through it, and exit. The senses that I hope will be stimulated the most however are one's senses of smell and touch. In the book Malnar and Vodvarka claim that "the strongest memory of a space is often its odor." They also claim that some of the primary odorants include floral smells, spicy smells, and minty smells, along with many others. Therefore, included in my garden will be leaves and flowers that possess a strong odor, primarily one of the three smells just mentioned. Some examples of these flowers include various herbs such as basil, lavender, and oregano, various mint leaves such as peppermint, spearmint and chocolate, and plants such as the licorice plant and banana shrub, which could also be used as a stimulation of the sense of taste. I hope that the smells that one gathers from the garden will be distinctive and perhaps also nostalgic. One's sense of touch will also be heavily concentrated on and stimulated with the presence of plants and flowers that have specific textures to them. These include some already mentioned such as the licorice plant which is soft and lamb's ear which is also soft. Other plants include cabbage, which could be used for taste as well, the magnolia, which has a distinct shape, philodendrons which are split leaves, and the weeping ilex which has gently serrated leaves. Also included in Sensory Design is a statement by Michael Southworth who found that "the blind preferred low to middle frequency and intensity sounds, and that delight increased when sounds were novel, informative, responsive to action, and culturally approved. Sounds with a rush and roar were considered annoying" (Malnar and Vodvarka). I wanted to have birds in the garden to give the garden a more realistic feel to it, but due to this statement of loud noises being annoying to the blind and also for the sake of convenience, I will instead put speakers in the garden which will play soft bird sounds and soft music, similar to those speakers found in the
Butterfly Rainforest in Gainesville, Florida which I visited. I believe that the garden will give the blind, those who do not get to experience nature the way others can, a chance to do so. They will be emerged in a place where they can achieve an awareness of the senses and a chance to truly enjoy nature in a way that they never have before.

Works Cited


What would it be like to live in a world of blindness? Those who are capable of seeing would probably shudder at the thought of permanently living in this state of dark and seemingly cloistered existence. Yet, one should not fail to realize that, despite their inability to see, the blind do, in fact, dwell in a world filled with a vast array of acute sensations which fully compensate for their lack of visionary capabilities. If anyone is interested in entering, at least temporarily, into the realm of sightlessness, then he should visit the restaurant, Dans le Noir in France. At this unique establishment, one is granted the privilege of enjoying an entire meal served by blind waiters in pitch darkness. The dark environment robs customers of their ability to see and as is so fluently stated on the Dans le Noir website, grants them the opportunity to completely re-evaluate the notion of taste and smelling through our gastronomic and pedagogical process? (http://www.danslenoir.fr).

It might seem strange at first to think of eating without being able to see what one is consuming; but this truly might be the best way to dine. After all, the enjoyment of food is mainly centered on one’s sense of taste. Yet, when a person is capable of seeing his meal, his attention is undoubtedly averted somewhat from its taste, because instead of focusing on the meal’s flavor, the person’s mind is partially consumed with absorbing the various visionary aspects of both the food as well as the surroundings. By eliminating this distraction, Dans le Noir, most likely, enhances the flavor of their food.

If the customer is not capable of seeing what he is about to eat, it is plausible that he might be more willing to try new dishes. How many times has one heard a child proclaim his aversion to a new type of food before he has even tried it? By observing the new and unusual appearance of a dish, children often immediately assume that the meal will be distasteful to their taste buds as it is to their eyes. The truth is, though, that if they could not see the food, they would probably eat it and maybe even enjoy it. The same principle should apply to adults. Thus, it would probably be best for someone to be introduced to roasted octopus, dog, or elephant in a setting similar to that of Dans le Noir.

Dans le Noir is just one of the numerous recreational facilities that cater to the sensations of the blind (and the seeing as well). Despite their inability to see flowers and other plants, the unseeing can derive a great deal of pleasure from the scents, sounds, and textures of a garden. Spurred on by blind people’s ability to enjoy nature, many have designed special gardens such as the one which will be cultivated behind the honors dorm of the University of Florida and which is described below.

The first thing that the blind visitors will encounter in this garden will be a cold iron gate leading into a brick pathway sandwiched between two sturdy picket fences by which the blind can feel their way to the center of the garden. As a way of greeting, wind chimes will be hung in aromatic allspice trees which will line the outer sides of the picket fences. While the guest walks along this pleasant pathway, the sound of rushing water will crescendo in their ears, until after about 20 feet they will reach an open, circular courtyard with a large, stone, gushing fountain in its midst. Two cushiony bench swings will be placed diagonally across from each other on either side of the fountain in the brick circular courtyard. That way the guests can sit and soak in the sun as well as rock and listen to the fountain’s rushing waters. The courtyard will be enclosed by lattice which will have ivy-clad sides but which will be open on the top to allow in the sun’s warming rays.

As they feel their way around the courtyard by means of the ivy-covered lattice, the blind visitors will be led to four different short pathways which will be described by Braille plaques on iron poles. After reading the signs, they will able to decide which path they would like to enter. Each new trail will be encompassed by more ivy-covered, arching lattice but will soon lead into completely open plots of circular ground. Because the ground behind the honors dorm is somewhat steep, it would be wise to level it off a little. Of course, one should not level it off completely, though, because gently sloping pathways can add interest to the garden (Vodvarka, 2004, 105).

The first path will be covered in gravel and will lead to a fragrant, touch-friendly herb garden. The beds in this garden will be raised about waist high and will curve around the circular plot of ground so that the blind can more easily touch and smell the plants as well as feel their way around. Tiny Braille
plaques will be planted into the dirt of each different plant and will identify the organism as being either thyme, basil, lavender, oregano, lamb's ear, rosemary, peppermint, spearmint, chocolate mint, licorice plant, or society garlic. Each plaque will also include a brief, educational description of the plant. The second path will be covered in grass and will lead to a similarly grassy plot of circular ground. As the visitors walk along the path they will be drawn forward by the tantalizing scent of jasmine and will soon find themselves in a world of varyingly scented flower beds. Each small bed will contain a different type of flower so that the various odors do not become too muddled. The beds will circle around the plot of ground and will contain flowers such as jasmine, geraniums, marigold, lilac, and gardenia. Low walls will enclose each bed; and in front of the walls will be descriptive plaques. To further separate the flower sections, a different tree will be between each bed, and in order to appeal to the visitors' sense of touch, some trees will have smooth bark like the European Beech, while others will have rough bark like the English Oak. In the center of this plot of ground, there will be a stone sculpture. The sculpture could be either abstract or it could be in the shape of an interesting animal such as an elephant or horse. Either way the blind will be able to feel the shape of the sculpture.

The third path will be made of recycled tire material which is quite springy and is often used on playgrounds to cushion children's falls. This earth-friendly path will lead to an extraordinary surprise of sound, but before the guests reach this interesting site, they will be immersed in a faint mist of water which will be released into the path. Of course, as they enjoy the cooling mist they will also begin to hear the sound of birds and will eventually reach a tiny screened in aviary filled with tropical birds, palm trees, fragrant plants, and a small running water feature.

Clearly, the blind are capable of enjoying their surroundings. Although they might be incapable of seeing, they are not retarded. Their minds work just as intricately and fascinatingly as any other person. Thus, more establishments, such as Dans le Noir and the garden for the blind, should be created. Places such as these would help to open people's eyes to the world of the blind and create a better standard of living for the visually handicapped.
Essay 10

Nature is so beautiful. It is unfair that due to uncontrollable circumstances, some people are unable to fully enjoy it. That is up until now. With the new wave of handicap focused services such as restaurants for the blind, even the blind can experience life the way it should be experienced, which is why I have designed a garden for the blind, or Jardin de la Nuit (Garden of the Night).

I will begin explaining my design by describing the path that has been chosen for this project. It is based on the land behind Hume that has a downward slope and a creek. The path begins behind Hume West near the sidewalk. It starts towards the creek and turns around the tree and stones placed to the left. It then continues toward the creek to the left of the trees and bench. There is then a path already warn down from excessive use that will be followed back up towards the Hume buildings. The path will then pass to the right of the two benches and around the large oak tree back towards the beginning of the path. Since the land is really steep in this area, the rails already existing will be used to walk up towards the buildings. The path will follow the curve of the railings back towards the creek. Here the land is really steep and hard to walk down. In order to use the least amount of effort, the path will then zigzag down the slope where it will finally end down by the creek near Hume East.

The plants and herbs that have been chosen are fragrant, textured or edible. Some are a combination of these criteria. In order to prevent sensual overload I have alternated between the three. This will help set a pattern and allow the visitors to know what to expect and how to experience each. For example, at the beginning of the path there will be basil, an edible herb usually used for seasoning. Around the stones and tree, jasmine will be planted, which has a very soothing and strong scent. After leaving the stones towards the creek, there will be lamb’s ear, which is very soft, followed by another edible plant. The fragrant plants and flowers that will be used are banana shrub, jasmine, lilies, tea olive, sweet bay tree and geraniums. Tangible plants include iris, lamb’s ear, magnolia, crepe myrtle tree, philodendron and alyssum. Finally, herbs and mints that will be used as an edible plant are basil, lavender, rosemary, peppermint, spearmint and thyme. In addition to these selected plants, I would also like to replace some of the trees already in the garden with weeping willow trees, for their texture.

At the beginning of the path, there will be a model of the garden with brail so that the visitors can become accustomed to the garden before venturing into it. In addition, samples of each plant will be placed in their respective areas on the model so the visitors know what each plant feels like and how to recognize it.

Although the plants provide tangible, fragrant and tasteful experiences they do not provide natural sounds. There is a creek which runs through the garden. However it is quite calm and hard to hear if not near by. I would like to position rocks and boulders in the creek to increase the sound of running water hitting against the rocks. Also, a microphone will be placed near the water and speakers will surround the garden so the soothing sound of the creek could be heard from anywhere in the garden.

Birds can be heard occasionally but to enhance the experience I would like to introduce mocking birds and robins into the garden, placing a net high over the garden so that the birds will be contained but free to fly about the area.

Most of the sounds will be provided by nature, but human made music is beautiful and calming as well. Therefore, classical blissful music will be played very lightly in the background to give a sense of paradise and complete relaxation.

This garden is about feeling and appreciating everything surrounding the visitors. However, without one sense, it is important to enhance the other senses of nature in order to experience the same delight.
Garden Design for the Blind

It is a commonly known fact that the removal of one sense sharpens and enhances the perception of the others. We as humans are very centered on sight, and we tend to give less weight to our other senses when it comes to perceiving the world around us. For the most part, our environment tends to consist of designs made for us to experience visually. We do recognize sound as important, but when we are not actively listening to music or speech, sound tends to fade into the background. While we don’t really notice it’s there, sound serves to give us many clues about our surroundings.

Our sense of touch is also important in many ways. We can use it actively, feeling many aspects of the world around us; a simple touch can read the temperature, surface texture, and hardness, among other things, of an object in our surroundings. We also possess a sense of kinesthesia, which involves cues from our muscles that give us information about the way our bodies are moving through space. An important component of this system is our balance system in our middle ear. This lets us know when we are or are not in a vertical position. Our leg muscles can tell us the conditions of the surface upon which we are walking and how far we have traveled.

Easily the most overlooked sense is the sense of smell. Most of us rarely think about it, but studies have shown that of all the external stimuli that affect the way we do things, odor might be the biggest influence on our behavior. Scent is a major component of memory, especially of pleasant memories. A whiff of a particular smell, perhaps lavender, might bring back memories of weekends at Grandma’s house, where the linen closet was scented with lavender sachets. Studies have linked changes in emotion and even basic instincts to our sense of smell.

The French have a restaurant called dans le noir (or in the dark) in which seeing people get an experience that is almost like being blind. They are guided to a table by waiters, some blind and some sighted; they eat their entire meal in the complete darkness. The principle behind this is that in the absence of sight, all the other senses are heightened. This would mean that the textures, tastes, and smells of the food would be experienced more richly. The design for this garden should follow the same sort of principle: in what ways can a garden be enjoyed other than visually?

This design for the garden begins with a basic layout. Since it is located on a slope, the path should have switchbacks similar to those built into a road through the mountains in order to prevent it from being too steep; this way, it will not be a straight path down the slope. It would be nice to have it covered with a soft grass or moss, as this would provide a different springiness of step than cement, wood, or asphalt would. Better yet, as long as it was carefully maintained and kept free of rocks, sticks, and biting or stinging insects, the visitors could even experience it barefoot. There should be a continuous railing on both sides of the path, carved from wood but extremely well sanded, with almost a velvety finish. It should not be varnished; it should feel natural. It must be made to be free of splinters, because the blind will rely heavily on it for guidance through the garden. In order to make the path more interesting, the railing should not be just straight and narrow the entire length of the path; it could widen and dip down at different points along the way, or perhaps have some sort of carved symbol signifying to the visitors that there is a plant in the surrounding area that they should experience through touch. These could be softly textured plants such as alyssum, lamb’s ear, pussy willow, and licorice, or have leaves or bark with different and interesting textures, such as smooth, waxy magnolia and wax myrtle leaves, ribbon-like liriope, lacy nandina and ferns, stiff, leathery podocarpus, gently serrated weeping ilex, and flaky crepe myrtle bark. There should not be too many large trees providing shade, so that the blind may experience the sun’s rays warming their skin.

As for sounds, the main one will be falling water. The sound of water is one of my favorites; I find it soothing. Research has shown that the blind prefer low-to-middle frequency in sounds, and also ones
which are not repetitive. A stream would be ideal, but maybe not feasible; some sort of inaturali rock waterfall would serve the dual purpose of providing auditory and tactile stimulation.

To complete this garden, the areas along the path will be heavily planted with fragrant herbs and flowers. They will be planted apart in groups of similar plants, so that each scent can be experienced on its own. They will be planted to provide a ìflowî from one scent to the next, from light and floral to pungent and earthy. This will draw all of the elements of the garden together into a complete sensory experience.
Essay 12

On Reading Richard Floridaís The Rise of the Creative Class; and Joy Malnar and Frank Vodvarkaís Sensory Design

Of all my positive attributes, creativity is not one of them. I think of creativity as the ability to come up with new things, using oneís imagination to create beauty, induce laughter, and/or provoke emotion. My jokes are always corny, my drawing skills are comparable to a toddlerís, and I suck at telling stories. ìCreativeî definitely does not describe me.

Richard Florida, in The Rise of the Creative Class, describes creativity as a separate entity from intelligence, and I totally agree. He also describes it as something acquired through experience. I have always been a nerd, but that doesnít make me a creative genius and my tunnel vision hasnít helped either. Florida mocked me with these words: ìCreativity is favored by an intellect that has been enriched with diverse experiences and perspectives.î

I thought that creativity was something you were born with, and that I just wasnít present when God was giving it out. Florida describes that theory as the romantic myth of creative genius, and says that creativity is inherent in all people. Ordinary abilities foster creativity. I never thought of it that way.

Richard Florida also goes on to say that creativity is energy-absorbing, tiring work. To come to think of it, it can be very laborious. My husband likes to design clothing, and sometimes he stares into space for hours daydreaming. Suddenly, heíd sprint into the bedroom, grab his notebook and start drawing. He could eat up a whole pencil, eraser and all, for that one drawing. Beads of sweat would form on his brow, and the nerve in the middle of his forehead would protrude. And Iíd know to keep our daughter away and leave him at peace. You see, I think my husband is creative. Heís got a great sense of humor, and heís an artist.

Geniuses like Isaac Newton and Albert Einstein and Thomas Edison were not only smart, but they also devised new theories, solved mathematical mysteries, and pioneered new gadgets. So, I learned from Florida, you CAN be book-smart and creative at the same time. On the other hand, creativity is so demanding that many geniuses throughout history remained single, without spouses or children. That sounds a lot like the lives of many doctors and lawyers today.

Another interesting point raised about creativity is that it is a social process. ìCreativity flourishes best in [an environment]Öthat is stable enough to allow continuity of effort, yet diverse and broad-minded enough to nourish creativity in all its subversive forms.î Going back to the example about my husband, after scribbling and erasing for what seems like hours, he would call me over to him and ask me what I think about his work. Only after my opinion would the work seem satisfactory to him. So creativity must be perceived as a good thing by a second or third or fourth person before it is approved by the creator. Even when I think something I say is funny, it goes into the corny-joke dump if no one else laughs.

Finally, I was struck by the view of creativity from the economic standpoint. Creativity drives forward movement in the economy. Êtís like what Iím learning in marketing class. Long ago in ancient times, recorded music was played back on LPís. Then someone thought of making this music portable and longer-lived, so the audio cassette was born. Years later, humans got bored with cassette tapes ìvomitingî into the player and going bad, so the CD was born. Now we can enjoy our music on MP3s. All of these ìupgradesî are examples of creative innovations. TV, radio and billboard ads have to be creative enough to spark interest in a prospective customer. Each season, new fashions have to be creative enough for buyers to actually go out and buy them instead of choosing whatís already in their
closets. Creativity is all around us, and it’s not only in the painters, musicians, and software designers. It’s also in the kindergarteners, stay-at-home moms, and library-dwelling geeks, too.

Sensory Design

The pages I read of Sensory Design reminded me of my middle school’s broadcast journalism teacher. We did this exercise once, in which he asked us to define some simple words, including the word apple. Each student gave his/her definition, but he could name a fruit that fit the same description every time. None of the definitions was quite the right one for an apple. He said, You can’t tell an apple until you see one. This relates directly to what Malnar and Vodvarka explained as tactile experience. Unless you actively touch a surface, you won’t know if it’s hard or soft, smooth or rough, wet or dry.

Malnar and Vodvarka explain something called the statolith theory. Statoliths are stabilizing organs in the brain, and when a walking path is uneven, the statoliths are repositioned to a sensitive position which thereby heightens the awareness of the person walking on the path. So the position, surface and level of the ground you walk on force you to pay attention. As the class walked through the butterfly rainforest, I did become more alert as we turned corners and descended/ascended slopes.

Reading Sensory Design gave me some ideas about how to design our garden for the blind. These ideas will be outlined in the following paragraphs.

Garden for the Blind *I can see the garden in my mind. I hope I can do a good job describing it.

From entrance to exit, there needs to be some sort of handrail to guide visitors through. I’d like it to be not the traditional metal handrails, but short marble walls rounded at the edges. The marble could be engraved with forest art: trees, flowers, river, etc. And descriptions of different plants and maps in Braille could extend from the wall away from the path, of course. Does that make sense? I need to have some reflective surfaces—i’ll explain why later. I’d like a path made of smooth stones—bumpy but not dangerously so. I’d like a winding path that leads to and around a fountain. The fountain should have benches around it for people to sit and mingle and relax.

From the fountain the path should lead to a gazebo-like structure, on the southern part of the garden. A large one, like a stage, where live groups can play music and sing, people can tell stories or read poems. Open in the direction of the fountain, like an amphitheater, sort of. Sound travels up the hill. Can you see this? I’m no architect, so I don’t know the technical words to describe what I see in my mind. Seats made of rust-proof metal maybe. Arranged like in a theater. Only a couple of rows, a total of 6 benches maybe. 12 people can sit and enjoy performances, and others can hear while wandering through the garden. Some sound can reflect off the marble walls and the stones—catch my drift?

Flora I’d like for the entrance to be lined with fragrant plants, to stir the senses early in the experience. Some mint and lavender bushes along the path entering the garden should work. Down where the gazebo will be, I’d like some cocoa plants, anise shrubs, and maybe some vanilla, if possible. The senses of hearing and smell will be stimulated in this area.

I’m not really picky about what plants should be included in the garden or where they should be placed, but I think it would be interesting to have different areas stimulating different senses. For instance, we could have the flora set up in three different phases. Phase 1, closer to the entrance, could feature plants that predominantly stimulate the sense of smell: herbs, jasmine, banana shrubs, lilacs, etc. Phase two, the middle part, around the fountain for instance, could have plants that stimulate touch: glory bush, lamb’s ear, weeping ilex, etc, where visitors can enjoy the textures of different plants while enjoying the refreshing sounds and mist from the fountain. Near the gazebo we could place some citrus trees and rosebushes out of reach. Since people will be more into the music, they might not venture to touch these thorny plants; we’ll put warnings up in Braille anyway so they won’t touch them.
Some details about the igazebo/stage structure. Could it be outlined on the outside with a gate-like fixture, so vines can grow on it? We could put some fragrant vine or other, like creeping wintergreen. When someone looks at it from a bird’s eye view or from behind, they should see all green. The structure should be made of some reflective material, maybe concrete, with a hardwood floor. Or maybe it could be made all in wood. I don’t know what limits there are to architecture. It needs to allow good sound projection even without microphones.

I’m apprehensive about where to put trees in the garden, because I don’t want the music to be absorbed by their bark. I can see a few near the fountain, camphor and crepe myrtle. The fountain could possibly be tucked away in a thicket of trees. It seems like we’d need more land for what I’m imagining though. If this is possible, then the fountain area would be more peaceful, an escape from outside sounds, an area for meditation maybe. That would be cool.

Can you visualize these images? More importantly, can you smell the flowers and hear the music? Can you feel the coolness of the fountain as you meditate in quietude? Can you feel the cool marble as it guides you along? Can you tell where there is a description of the plant you smell? Can you tell when the road is going to turn by reading the map? If you can sense these things like I can, then we are on our way to building the perfect garden.
Richard Florida’s The Rise of the Creative Class is a book with extremely high ambitions. Its aim is nothing less than to identify the newest social class, promote consciousness of its own identity, and inspire it to use its immense resources reshape society as a whole. This new ‘Creative Class,’ according to Florida, is composed of members of any profession that are paid to exercise their creativity. Florida traces the development of this class from the 1980s to its definitive emergence in the mid-1990s, and notes how it has assumed an increasingly dominant role economically and culturally. It is an inspiring and daunting realization: that as many as thirty-eight million Americans make their living through creativity, and that so much of our prosperity or failure depends on their most minute actions.

Furthermore, Florida asserts that the esoteric habits of the members of this new class, their collective likes and dislikes, directly shape the values and norms of our culture. Thus, if it were made conscious of its own existence, the Creative Class could remake society along intelligent, rational lines. It is a heartening thought that by simply fostering creativity among all people, mankind could peacefully and effectively recreate the mold of its own existence. According to this model, education and communication could replace warfare and violence, making human civilization something far more peaceful and validating. It is an enormously difficult goal, but one well worth seeking.

An example of this creativity in action is the adaptive environment of Dans le Noir. Seeing visitors are plunged into a situation utterly unfamiliar to them, forcing them to cope to the best of their ability while helping them to identify with those who live without sight. Yet darkness is no obstacle for the visually impaired, who have long since learned to overcome this barrier to normal functionality. Without being dependent on the single faculty of sight, they are able to rely on the other senses and are in effect more fully cognizant of themselves and their surroundings than many sighted people. Contemporary movies like At First Sight do justice to this fact, as do older films like Wait Until Dark, in which the protagonist loses her sight in adulthood and is forced to cope with the loss. The film chronicles her journey towards self-reconciliation and acceptance, and details her transformation of her apartment into an environment capable of sustaining her under her new conditions.

The plan to perform a similar feat on a larger scale at the University of Florida, to create a ‘Garden for the Blind,’ seems entirely warranted, and the proposed location near Hume Hall is singularly appropriate. There the terrain is steeply slanted to the North, which of course could be altered by construction of terraces or simple leveling, but I believe that some incline should be allowed to remain. In this way, visitors to the garden would constantly be able to use their sense of spatial relationships to orient themselves and identify roughly which direction they are facing. I envision the garden in the design of a very large compass, or the face of a clock, with sensory events at critical points around the periphery. The entrance to the garden would be at Due North (12:00 on a clock). Visitors would constantly be connected to it because of the slanting ground, which would always indicate the direction back to the entrance. Due East (or 3:00) would have an olfactory event, such as flower beds with particularly pungent aromas, or trees with scented blossoms. Some possibilities are allspice and sweet bay trees, as well as geraniums, snapdragons, marigolds, jasmine, simple mints, and any number of familiar garden denizens. For something more exotic, and therefore probably captivating, I suggest the inclusion of the Jacqueminot rose, which has all the aromatic charm of other roses yet has no thorns and is smooth to the touch.

Due South, or 6:00, is the point to which gravity and the slope of the hill would naturally draw all visitors, so it must have a particularly important theme. I recommend a tactile event, with perhaps a raised terrace to create a level surface at the bottom of the hill. There any number of plants with soft leaves and smooth stems and branches could be gathered, providing a flood of sensory feedback for the hands as they caress their surroundings, creating a kind of botanic petting zoo. Some sort of hanging plants, perhaps with thin stalks or dangling vines, could be arranged so that they gently rub against the
faces of those who walk through them, expanding the physical range of the experience for visitors. I also recommend that guests be encouraged to remove their footwear to tread gently through the grass, earth and soil.

This may not be feasible, but ideally Due West, or 9:00, would have a different type of tactile event. Ideally there could be some sort of heat source, perhaps a small gas-powered flame such as that at the grave of John F. Kennedy, carefully controlled and set apart to avoid danger, but sufficiently strong enough to provide a sensation of warmth to the visitors who draw near. Whether this is practical is doubtful, but the element of temperature is very important to our lives, and one of the easiest to be noticed by our senses, making its inclusion here desirable. Finally, having completed a view of the periphery, I would place a sonic or auditory event at the very center of the garden, so that at each moment in their travels around the field, visitors would always be able mentally to position themselves with regard to the source of the sound. The most audible yet unobtrusive sound I can imagine is that of falling water, so I suggest it be a fountain.
In ìDimensions of Creativityî in The Rise of the Creative Class, Richard Florida makes note of the dramatic changes seen in the modern worldís society contrasted with society during the 1950ís. Florida delves into the more conspicuous aspects of these analogous societies and makes mention of how at first the differences between them to not seem that dissimilar at first glance. Technology, modern medicine, and other realms remained more or less the same when compared to society in the early 1900ís. What strikes the change between the 1950ís and today as ìbewilderingly differentî is the existing social order along with its norms and values.

The driving force of this dramatic social change, taking place within the last 50 years, has been the rise of creativity which has instated itself in our economy and society, as it values creativity as well as creative impulse. Creativity in todayís world is continual and widespread. Technological creativity and economical creativity have interacted with artistic and cultural creativity to produce a ìcreative ethosî that compels our society through its dynamic transformation. Through the development of these creative elite in our society we are also met with a responsibility to the rest of humanity, to guide and direct them throughout the course of their lives. This must be applied especially to those who are disadvantaged and cannot take care of themselves adequately. Through innovation and design, their needs can be met so that they may harness a sense of belonging in the world.

The land located immediately south of the Hume Hall Honors Residential housing consists of approximately one or two acres encircled by a number of trees, all of which is on a slope when looking at the topography of the land. A proposal has been made to build a garden for the blind on this sector of land. Different types of plants and natural resources would be installed into this area in the creation of this garden that would require the use of sensory functions other than just sight or vision. An important bodily function or sense must be greatly considered when dealing with the blind is their sense of touch. In the book Sensory Design, authors Joy Malnar and Frank Vodvarka describe haptic perception, which they quote from James J. Gibson, as ìa sense of touch that includes temperature, pain pressure, and kinesthesia encompassing both body sensation and muscle movement.î With this form of consciousness the self may become aware of oneís environment and reality without thinking, hearing, or thinking.

For these reasons, whatever is situated into this garden for the blind must be attractive towards the senses of smell and primarily touch, as these senses are usually heightened when accompanied with a loss of sight. Leaves and flowers with a soft texture such as the alyssum, lambís ear, the licorice plant, and the tibuchina otherwise known as the princess flower would be dispersed throughout the area giving the blind that come to visit the garden something that is pleasant to touch and feel. To add contrast to these different leaves and flowers, plants with a different, coarse texture would be brought in such as the crepe myrtle tree for its bark, different kinds of ferns such as maidenhair, Boston, and holly, the weeping ilex which have leaves that are lightly serrated. This contrast in textures of the variegated leaves and flowers may even be divided into sectors of the land so that the blind may distinguish among these different areas and know where they are positioned.

Yet another sector can be designated to those leaves, and flowers that exude a fragrance about them. These include such plants as an allspice tree, a camphor tree, an anise shrub, geraniums, lilacs, mandevilla, and different kinds of aromatic herbs such as basil, lavender, oregano, rosemary, tarragon, and thyme. All of these plants offer distinctive fragrances that can be discerned by the blind that walk amongst the garden and smell the plants for themselves. With a tour guide the names and classification of all these plants can be given to associate what they sense with a verbal designation. A creek with a trickling stream can be installed in this garden for the blind to separate these distinct regions. In addition to this a body of water such as this may also behave as an aural stimulus for the visitors and to associate it as a landmark.
In Sensory Design, Malnar and Vodvarka explain that making one's way through a pathway, the memory of the stimulated senses are sequential like that of a movie or an orchestrated piece of music where there is established a physical cadence in viewing modes. We form a three-dimensional sense of our surroundings by parts, through multisensory and temporal engagement. Malnar and Vodvarka also make note of the focal points on route sequences of spatial experiences involving vision, time, and kinesthesia, the sense that determines variations in level, position, and surface of path. This is important to mention due to the incline that is on the land to be made a garden for the blind. This landscaping heightens a visitor's senses towards the ground they feel beneath them, as the inclination brings their utricles, organs in the brain that sense their position in relation to the ground, at approximately a 180 degree alignment where they are the most sensitive and in a better position to perceive.

This proposal for the garden appears adequate for the amusement of individuals with impaired vision. A venture such as this would allow such people in the Gainesville area to take pleasure in experiencing nature, the environment and the sensations entailed in the experience.
Essay 15

Garden for the Blind

When designing a garden for the blind one has to adjust the design to fit the needs for the enjoyment of the garden by the blind. Although the blind have lost their sense of sight, their other senses are heightened tremendously. Adjusting to these heightened senses can be a struggle by itself but can prove to be very beneficial and breathtaking in the end. Many advantages and disadvantages come with this design concept. Overall when designing a garden to be enjoyed by the blind one should focus on creating an atmosphere that adheres greatly to the sense of both smell and sound.

The overall structure of the garden for the blind will be snake like. Based on the topography of the plot of land being used for this project, a small hill behind Hume hall, a snake like structure will be best in tackling the hills. The snake-like pathway will start at the top and flow from east to west, across the hill while still traveling downward. This will make the drop in elevation gradual. Also, the garden will also be enclosed because birds will be utilized in the project, and it will allow for sunlight to be used efficiently.

In the beginning of the garden for the blind the participant will be struck with extreme sound. The sound will not be intense in volume, but intense in the quality and depth. I will house birds that will live near the entrance and have loud chirps. It is not vital the birds be of a particular species; however, being that the mockingbird is the state bird of Florida, mockingbirds will be appropriate. Nightingales also have a distinctive call and will be added. In conjunction with this upheaval of sound, the terrain will be altered in the entrance. I will have either gravel or stepping-stones; this lets the participant know that he or she is entering the garden due to the contrast between the land before the entrance and the entrance. Also this uneven terrain should heighten the senses of the participant. Malnar and Vodvarka in Sensory Design suggest that "uneven terrain/pathways heighten[s] our awareness of surfaces by obliging us to bring our sensory organs into the best alignment to perceive them" (104). The flowers that will be present in the entrance will be yellow jasmines and scented geraniums. I choose yellow jasmines and scented geraniums because of the sweet and distinctive smell both give. The entrance will serve almost as a sensory overload. The reasoning behind this overload of information is to make the entrance both breathtaking and definitive. The participant needs to know that he or she has just entered the garden for the blind. In addition, the sensory overload will force the participant to become more aware, for it may even confuse them. The confusion is beneficial in this case.

The mid section of the garden for the blind will serve as a constant decrease in intensity in order to relax and soothe the senses once again. Here there will be the odorous section of the garden. First will be the sweet smelly flowers. The flowers included in this section will be apart of the jasmine family and geranium family. These scents are strong but not incredibly strong, plus this will serve as a transition from the sensory excitement given in the entrance of the garden. The next section will be the exotic section. Here non-thorny citrus plants, for instance orange trees, banana shrubs, and allspice trees will be included. These exotic smells will contrast nicely with the sweet odors presented previously. I will include another species of bird of exotic decent. This will create the audio environment to accompany the exotic odor experienced. In addition, some form of a waterfall will be placed here as well to add to the exotic effect. The next section will include plants that give off odors that are used in foods. Mints will be utilized tremendously along with herbs and licorice plants. The specific herbs to be used will be oregano, rosemary, basil, and tarragon, and the specific mints used will be pepper, spear, chocolate, and pineapple. This mid section serves to decrease the intensity of sensory perception by using odors to slowly calm down the participant from the exciting entrance. Each smell should take the participant to a different environment.

The next section will serve as the texture section. Here the participants will be urged to touch their surroundings. Even though the name "texture section" suggests that only plants with texture will be
utilized, marigolds and sweet bay trees will also be used to lure the participants into touching some of the plants. Not only are those two species of plant not harmful to touch but they have a distinct scent as well. In addition, a licorice plant will be used too because of its smell and soft texture. At this stage of the garden the participant will find that plants of similar textures grouped together. The first section of will be the soft section. These plants have a very light and smooth texture to their leaves. The plants included will be licorice plant, lamb’s ear, and alyssum. The section following will be the waxy section. This will include plants with a slippery, slimy feel to them such as the wax myrtle. The final texture subsection will be the rough section. This will includes plants with a rougher and jagged texture. The weeping ilexis leaves and philodendronis split leaves will serve as the main plants within this section. Also the rough section comes at the end for it will serve as a transition to the finale of the garden.

The finale of the garden will have a waterfall and include all of the birds already mentioned. The purpose of the finale will be more of an audio approach rather than odor approach. This will leave the participant satisfied and hopeful that the future will be just as pleasant as the garden they just experienced.

Works Cited

Creating a Garden for the Blind

In creating a garden for the blind, the senses of smell, hearing and touch take on prominence. Even without sight, a person can enjoy a garden simply by feeling the symmetry of leaves, touching the bark of different trees and feeling for buds at the start of spring. Even though a visually disabled person cannot enjoy the vibrant colors of a rose garden, they can enjoy the strong scent from such flowers. Because the sense of sight is taking a back seat in this garden, importance is also placed on maneuverability through the garden.

A Braille board should be placed at the entrance to the garden, explaining the topography of the garden and how to maneuver through it without assistance. Another Braille board at the entrance should explain the garden. To facilitate easier movement, the garden could be designed after a clock. One should enter the garden at twelve o’clock and walk clockwise through the garden; at each point on the clock, one would encounter plants of various scents and textures.

The path around the garden should be smooth and even in order to ensure easy independent movement. In contrast, small pebbles along the side of the path could indicate the presence of Braille boards that explain the plants. In addition, cobblestone or another stone variety could indicate the presence of benches. The flowerbeds could be raised about two feet from the ground. This would not only make it easier to touch and enjoy the featured plants but would also place flowers and plants at a perfect height for those guests with physical disabilities.

Furthermore, these exhibits could include hanging pots with plants of special interest. The plants placed in such pots would be those with special textures or appeals. As the potted plants grow to large for the pot, it can be planted in the flower bed and replaced with another interesting plant or simply a smaller version of the original plant.

As guests enter the garden, they should be greeted by the sounds of flowing water; a fountain or waterfall placed here would create a welcoming sound. Palm trees of various shapes and sizes placed around the water feature would provide an interesting texture for guests. Both the leaves and bark of these thriving plants would provide attractive textures.

As a guest moves to one o’clock, the smell of citrus could greet them. This area could include orange, grapefruit, lemon and lime trees. Each tree would provide an interesting smell. In this area, the flowerbeds would not need to be raised, this would allow guests to touch the bark, leaves and fruit of the trees. Also, the hanging baskets in this area could include fruit to taste.

The following section of the garden could include many plants that are soft to the touch. For example, lamb’s ear, the licorice plant, the princess flower and the alyssum plant would provide leaves that are soft to the touch. These plants would need to be elevated in order to make it easier for a visually impaired person to enjoy the plants. In addition, colorful flowers such as tulips and snapdragons may be added to this area. They would bring appeal to guests with sight and have a slightly silky feel for the blind guests.

As one moves through the garden, they would next encounter an herb garden. In this area, guests could not only touch and smell the plants but could also taste these plants. Herbs such as basil, oregano, tarragon, and thyme should be used and may remind one of an Italian dinner. This section would also need to be elevated in order to be easily reached and touched. Herbs such as rosemary and lavender
should be used in other sections of the garden in which texture is emphasized. For example, lavender would make a good addition to the soft plant section because of its calming, soft scent.

The next section of the garden could emphasize the textures of different plant leaves. A philodendron, a variety of ferns, a weeping ilex and a wax myrtle would make a good choice for this area. This would also be a good area to add rosemary, because its leaves have an interesting texture and the plant must be touched in order to experience the scent.

While continuing through the garden, a guest could come upon a rose garden. In this section, roses with thorns should be placed back away from the path so that guests do not touch the thorns. However, wisteria could be placed along the path and touched because of its lack of thorns. In order to strengthen the rose scent, a mister could be placed in this area. The presence of water would intensify the scent of the roses and the humidity and light mist would appeal to a personís sense of touch.

Another section of the garden could made of up different trees with an appealing bark texture. A crepe myrtle tree or a birch tree would provide a smooth bark, while a pine tree would provide a rough bark. Jasmine could be planted along the base of these trees and would provide a strong scent when in bloom. The final section of the garden could include more fruits such as blueberries, strawberries, bananas and pineapple. Each of these plants could be eaten and provide interesting textures. For example, the banana tree has large waxy leaves, which greatly contrast the spiny pineapple bush. Mint could also be planted in this area to provide an appealing smell.

Among these plants, birdbaths and bird feeders should be placed in order to attract a variety of birds. The sounds that these birds produce would be appealing to the guestís sense of hearing. In addition, in order to make use of the wind, wind chimes could be placed in some of the trees. A variety of different chimes would produce different sounds and played together could create lovely music. By running a stream through the garden, the sounds of flowing water would also appeal to the guests. Also, brightly colored flowers could be added in various places around the garden. These would not only appeal to the sighted guests but would attract butterflies and other insects, which could appeal to a personís senses of touch and hearing.