

VISUALLY IMPAIRED LIKE ME:

A DOUBLE BLIND STUDY

By: Elizabeth Hoppe
Joseph Myers

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Traditionally, statistics about the population of visually impaired people have been notoriously low. Problems regarding definitions of visual impairment, lack of a good registry process, and reluctance to admit a handicap have all contributed to make the figures available less credible.

However, most experts agree on one thing. As the general population ages, and as medical advancements prolong the lives of those with systemic illnesses, the numbers of people who are blind will sharply increase.

Blindness will soon be everybody's problem, as more and more families are touched by its presence. The foundation should be laid now, for this inevitable future.

The day-to-day struggle of the visually impaired to maintain independence is difficult for sighted individuals to understand. Those with sight take for granted many of the things lost when an individual loses vision, such as loss of mobility, communication, perception of visual pleasure and beauty, and a loss of security.

As future optometrists who will be dealing with the visually impaired, a certain level of understanding is expected, if not mandated. To have some experience in simulating visual impairment will bring about a deeper knowledge of the pitfalls and frustrations the blind can face. It will help us in counseling and reassuring patients, as well as being able to understand the problems presented in a case history.

On another level, it is a personal challenge to face the simulation of visual impairment and try to cope with it. By developing our own strategies for dealing with everyday situations, we are able to try to conquer the visually impaired's feeling of dependence and helplessness. Thus, we are able to delve into a more personal level than a clinical dissection of the feelings a blind individual may express. It is a challenge to try to achieve independence and mobility while visually impaired, and we hope to meet it with success.

Any time a person has public dealings with another individual, they are being put to the test of a series of judgements. Many areas are surveyed, then added up to give a total impression or judgement about that person. Their clothing, body language, mannerisms, speech, and numerous other areas are all part of this judgement interaction.

We hope to attempt to qualify the interactions a visually impaired person experiences through other's actions, reactions, and apparent attitudes displayed.

One widely held belief about blind people is that they experience a greater recognition of the "good of the world." As described by the Reverend Thomas J. Carroll, he finds this to be untrue.

They say that blindness brings some people for the first time to a recognition of how much good there is in the world, a realization of the number of people ready to assist, to go out of their way to help others, etc. Undoubtedly, it is true that many people do lead such self-centered lives that ordinarily they are not aware of the goodness or charitable acts of others, and some of these people experience an awakening when they find themselves helped by the love of others.

But this experience, again, is not universal. Many people are already aware of the existence of goodness and helpfulness; many people who were unaware of them before blindness continue to be unaware afterward. ¹

With these thoughts in mind, we hope to compare the feelings a visually impaired person has about how others perceive them, to an objective observer's notes on the interactions. We will attempt to try to note if there is a disparity between perceptions, whether this might be due to a loss of security with loss of vision, a difficulty in interpreting facial expressions due to loss of acuity, or some other reason.

A three-part working hypothesis has been developed for use in this study:

1. More contact will be made when simulating visual impairment
2. The contact will be initiated by others
3. The contact will be made with good intentions

High-powered contact lenses were worn to produce blur at all but extremely close distances.

¹ Reverend Thomas J. Carroll, Blindness: What it is, What it Does, and How to Live With it (Boston, 1961), pp. 358-359

Joe wore a contact lens of +14.50 D in the right eye, and +12.50 D in the left. This produced visual acuities of 5/700 and 7/700. At 20 cm. Joe measured 12m acuity in each eye. His contrast sensitivity was within the normal range when he was working at a 2cm. distance. At normal test distance, Joe could not reach a sensitivity level.

Because I am a 4.50 D myope, my total plus over correction came out to +19.50 D, and +16.50 respectively. This resulted in measured acuities of 5/700 and 8/700, with near acuities of 12m. Again, my contract sensitivity levels were within the normal range at an extremely close working distance.

The unequal power of my lenses caused images to alternate in magnification as I alternately suppressed one or the other eye. This would cause objects to swell or shrink as I viewed them.

The translational movement of the lenses on blinking caused differences in clarity as the optic zone passed my pupil. This could simulate the vision changes a person could experience as objects pass in and out of a central scotoma, or as vision fluctuates in diabetes.

Glare became a big problem as lights became large blur circles reflecting on all shiny surfaces. Looking out the window, the sun blotted out all images of cars and people.

The light preference was definitely for dim illumination with direct lighting on the object to be viewed. The source had to be oriented to avoid shadow and glare.

Most of the people functioning as visually impaired or legally blind have much greater acuity levels than we describe. We overly reduced our vision as an attempt to compensate for the fact that we are not truly visually impaired.

We have already developed a visual memory, motor skills, and perceptual concepts that a blind person might have a difficult time mastering. Because of this, we may be a little more confident in some situations. Vastly reduced acuity may help to reduce some of this confidence.

No matter how long we wear the contact lenses, we know that we will return to the world of the sighted at the end when we remove the lenses. No amount of simulation can remove this knowledge, or make us feel that there is no cure for our blindness. We lack that state of mind in knowing that life will always be this way.

There is a lot of controversy in simulating blindness, as described here by Carroll:

To some people, it is a simple tool which can help teach sighted people about blindness; to others, using a blindfold for this purpose is a kind of play-acting rightly scorned by serious professionals.

Experience shows that the blindfold can be a very valuable adjunct in any training program.

...it should never be used with the idea that it can teach anyone "what it is like to be blind." No use of the blindfold for any length of time can teach the sighted person what blindness is. Its value lies simply in the capacity to bring home very quickly to the sighted some of the reality problems of blindness. The blindfolded person can learn, as he could in no other way, some of the difficulties involved in such losses as those of mobility, ease of spoken communication, and the techniques of daily living. But he can never grasp from blindfolded experience the experience of blindness. In this sense, it is play-acting.²

Blindness has often been described as a "silent handicap" because it is not as readily apparent as a wheelchair or physical disability. Patients have often complained about the fact that people don't realize why they may be acting differently, or that people don't believe they are blind.

Such an example may be related in this story by Helen Clegg, a woman visually impaired since birth.

² Carroll, p. 85

I wouldn't carry a cane. My husband would say to me, "Honey, you've got to get a white cane." I refused. So, a short time later, when I was on a train, I went into the club car and ordered a coke. The waiter put it into a round slot so it wouldn't slide, and of course, I couldn't see it. I was looking for it when the man next to me said, "You should carry a white cane."

"Well!" I answered indignantly, "May I ask why you're saying this to me?" He said, "Yes, I don't mind telling you. When you first walked into the club car, I didn't know whether you were drunk, or on dope." ³

However, as Mrs. Clegg further relates, the cane did not solve her recognition problems.

So, I got a white cane when I got home. It was Christmas Eve afternoon. I was on a last minute shopping spree -- me and my little white cane. I walked into a department store, in downtown Chicago, and said, "Can anyone tell me where the wool plaid shirts are?" Someone walking by me said, "They're over there." My cane is sticking out in front of me; I want everyone to see it. I walked some more and still couldn't find the shirts. So, I repeated my question, and received the same answer, "They're over there." Finally, I found them. Now what am I going to do? I've got the wool plaid shirts, but how do I tell what size they are? I ask for help, and the answer is, "They're all marked in the collar, lady." And again, here's my cane.

Well, finally a customer helped me. I found the cash register by listening for the sound of it. I thought I was at the end of the line. I heard a voice behind me say, "You can't get away with this. I've been standing here a long time. Get to the end of the line." I tried again to get to the end and heard another voice say, "I saw you trying to pull that stuff down there." About that time, someone tapped me on the shoulder and said, "Come with me." It was a clerk, who packaged my shirt and took my money. I got out on to the street, waiting for a bus. I stuck my head in and said, "Does this bus go to California and Archer?" My cane is right in front of me. The bus driver, in a gruff voice answered, "There's a sign on the front of the bus." So, I got on and paid my fare, and held my cane in front of my nose, and said, "Do you think I'm carrying this for an ornament?" ...that was all I needed. I had admitted defeat, I had carried this damn cane for the first time, and I get all this. By this time, I'm crying. I told my husband, "Don't ask me to carry this again, or I'll hit you over the head with it."

³ Elizabeth C. Perry, and F. Hampton Roy, M.D., Light in the Shadows Feelings About Blindness (Arkansas, 1982), pp. 93-94

Helen laughs uproariously at this story, then says, "If I were not blind, would I be that observant?"

For these reasons, and because we wish to compare our simulated experiences to our seeing experiences, we have chosen to try to look as normal as possible.

The public is biased in their behavior based on clothing. People who dress well often receive better service and treatment than someone who may be poorly dressed or out of fashion. We have chosen to keep our appearances to our normal college student apparel. Thus, we will be able to compare to our previous experiences without the taint of altered personal appearance.

The attitudes we display will undoubtedly affect how others perceive us. If we appear independent or needing help, practiced at mobility techniques or inept and stumbling, and comfortable in the situation, or uncomfortable and confused, will all have great bearing on how others treat us.

We have decided to try to complete all tasks as fully as possible, and as successfully as possible, much as someone who is trying to be independent would. Undoubtedly, while trying this, situations will arise when we stumble, appear inept, or need help. But this is normal and would likely be a part of a visually impaired person's quest for freedom.

To establish base line data, we will perform a task in the normal fashion as a sighted individual.

To evaluate the situation, the following steps will be taken:

1. Number of contacts will be quantified
2. Who initiated the contact will be noted
3. Attitudes displayed will be assessed
4. People around but not in direct contact will be observed
5. The functional assessment scale will be used to evaluate the task performance

The functional assessment scale was developed for use by the Independent Living Rehabilitation Program of the Michigan Commission for the Blind. It is as follows:

DEFINITION: If you had to do (- task -) alone, how would you perform this task?

- 0 Normal Capacity - Client performs task with satisfactory completion
- 1 Diminished Capacity - Client performs task but satisfactory completion is somewhat affected by problems with speed, pain, or confidence
- 2 Reduced Capacity - Client performs task but satisfactory completion is seriously affected by problems with speed, pain, or confidence
- 3 Incapacity - Client cannot perform task with satisfactory completion
- 9 Unable to obtain a reliable rating

DEFINITION: How task is performed

- A Alone - Client performs task alone
- B Aided Performance - Client requires aid or appliance for normal completion of task
- C Assisted/Dependent Performance - Client cannot safely perform task without human assistance
- D Augmented Performance - Client requires both human assistance and an aid or appliance
- E Hired - Client hires task out to someone else, task is performed by a relative/friend or task is provided by facility
- F No desire - Client has no desire to perform task or have task performed by another person
- G Unable - Task is impossible to achieve or sustain, assisted or augmented performance has safety or completeness of task concern

The experimental data will be obtained and analyzed in the same manner. It will be described in anecdotal form within the following pages.

MALL SHOPPING

Going shopping at the mall was my first experience at simulating visual impairment. I felt somewhat nervous as I left the car and headed toward the mall.

The day was overcast, so glare was no problem. I could distinguish the blurs of cars that were parked, and see smaller, moving blurs of other shoppers. I heard the sound of a large engine; looking up, I could see a large white object crossing the path in front of me where I was headed.

After avoiding the truck, I moved toward the sidewalk. I couldn't determine exactly where the curb was, so I stumbled slightly, but not too badly. A sign popped suddenly into view on my right side, and I was able to avoid it. Now at the door, I could not locate the handle on it. I began to grope against the glass, but the door next to it swung open as people were leaving, so it was much easier to catch its edge before it shut again.

Once inside the mall, the main problem I experienced was glare. Overhead lighting, and the shiny floor combined to make everything look as if it were covered with a luminescent fog. As I looked straight ahead, all I could see was white light.

Suddenly, people began popping up out of this glare. I didn't have much warning before a person could be distinguished directly in front of me. At first, I couldn't tell male from female. They were all over-sized torsos without legs or heads.

I began making my way towards Penney's using my visual memory from the few times I had visited the mall as a sighted person. I began looking around at the stores, lights, and people. Occasionally, I could read some of the more plain letters on the store names, or recognize them in some other way. For example, I could tell Walden Books from the other stores by the characteristic dark green and gold sign.

As I walked along, I wondered if I was cutting through couples or families walking together. I could tell people were there, but without the clues of male and female, or better depth perception, I wasn't sure if they were walking together. Everything seemed to be moving very fast, and background noise seemed exceptionally loud.

Once I went inside Penney's, my vision dramatically improved. The dark carpeting, and more subtle lighting did not make glare any where near as much of a problem.

My goal was to buy a peach colored, short sleeved knit shirt with a collar. I knew from previous experience about where the sportswear section was. By chance, I happened upon a display table containing what I wanted almost immediately. I could tell the color was right, and by feel, it was the right material. However,

when I held the price close enough to see it, I felt that the shirt was too expensive. I thought I could find a similar shirt in a different brand that would be in my price range.

I began circling about the different departments. Without really thinking about it, I developed a strategy that relied mainly upon looking for the right color. Once I spotted an article that was the peach color, I would feel the material. I know a lot of the articles I was feeling weren't even shirts, or if they were shirts, they weren't the right material. I began to get somewhat frustrated, because I know that they must have more shirts somewhere.

I tried to avoid the maternity and lingerie areas. I couldn't really tell where they began, so I felt like I might have been missing some areas. I decided to look in the glass display shelves. Previous experience told me that I might find what I wanted there. I felt as if I was taking a lot of time to accomplish the task successfully.

Finally, after reaching the saturation point in frustration, I decided to look at the shirts I had seen at first. They were all folded neatly, and held in place with pins and plastic clips. I held the shirt up close enough to see the size, selected a large, and began to unfold it. I used mainly tactile sensation to find all of the clips. Once unfolded, the shirt seemed huge. I did my best to fold it back, but I felt like I was wadding it up in a ball.

I repeated the procedure with the medium and small sizes, but they too looked like they were made extra large. I decided that they must have been cut in an oversize fashion, but now I wonder if my perception was off.

I wanted to successfully complete the task, so I decided to ask a saleswoman for help. I could now distinguish that most of the people around me were female, but I wasn't sure who had coats on, and who might work in the department. I decided that the safest thing would be to approach a cash register and wait for someone to come help me.

I waited quite a while and no one came. I decided to go to another department where I remembered another cash register. Again, no one helped me. I began to walk toward the back of the store with the intent of coming across another register. As I walked down the aisle, I heard a clicking noise. I stopped to listen, and I realized that it was someone marking prices. I walked toward the sound, and I almost stumbled across a saleswoman kneeling on the floor next to a large rack of clothes. She directed me to the juniors' department. I asked where it was and she pointed in the general direction. I was able to find a clerk fairly rapidly this time. She was very helpful, but they didn't have any other similar shirts in stock. I decided not to buy the shirt that I thought was so big.

My next task was to go to the pet store and buy some finch seed. I knew the general area, but I was experiencing the same glare problems. I was sure I was at the right store when I heard parakeets singing in the front.

When I go to a pet store, I always enjoy looking at the animals. I stopped by the area that held the puppy cages. I was very disappointed that all I could distinguish were small black and gray blobs. It was even more disappointing to hear the other people exclaiming at the sight of the adorable puppies as they watched them.

I made my way to the back of the store. Glare was still a big problem, because the floor, walls, and shelves were all white. At the food bins, I was surprised to learn that I could read quite clearly the word "finch" printed in black marker. I didn't have any trouble scooping out the amount I wanted.

As I made my way to pay for my purchase, I realized that this time my task had been performed in less time, because I couldn't enjoy looking at the pets on display.

Paying for my purchase, I very carefully counted out exact change of two dollars and thirty-three cents. I was very surprised when the cashier gave me back twenty cents in change. Apparently, I had mistaken a quarter for a nickel. I may have mistaken a twenty for a one dollar bill, for all I knew.

I felt very relieved to get outside and get back into the world of the sighted.

Observation --

It should be noted that I'm a virgin observer in the sense that I've never observed a visually impaired person functioning in public for a prolonged period of time. Except for the fact that I know Elizabeth's visual acuities are approximately 5/700 in a clinical setting, I have no reference as to how she will function and to what degree an homonymous blur will impair her natural visual perceptions.

Through a series of five tasks, I evaluated Elizabeth's performance, as well as her social interactions. I had fairly low expectations for successful completion of these tasks. This may seem an ironic statement coming from a fourth-year optometric student yet I feel my expectations were liberal when we consider perceptions of the general public.

Elizabeth's first task was to shop at a mall and purchase a predetermined article from a designated store. I was to evaluate Elizabeth on:

- a) Locating the store
- b) Locating the department within the store
- c) Finding the rack with the articles
- d) Finding size, color and price
- e) Trying articles on
- f) Finding cash register
- g) Paying for items with appropriate denominations

I parked approximately 100 yards from the mall. I noticed a schoolmate's car in the parking lot. (This seemingly benign situation represents a major problem for people with late-life onsets of visual impairment.) If Elizabeth should pass this person in the mall, could she recognize the person? (At 5/700, most unlikely?) Would the person verbally call out (enabling Elizabeth to recognize the voice and avoid an embarrassing situation)? Or would Elizabeth offend this person by giving no recognition? Already a few of the complexities of being visually impaired had arisen.

I allowed Elizabeth to enter the mall by herself which meant she had to cross the traffic lanes between the parking lot and the mall sidewalk. I took my eyes off her momentarily to lock the car. When I looked up, I saw Elizabeth stopping to give way to a very large Mack truck. This gave evidence that she still had a gross perception and motion detection ability.

Thus, she made it to the mall safely. There were no problems with the doors or avoiding people. The mall seemed to be fairly delineated, with much contrast so that Elizabeth could maneuver around fountains, planters and benches. A slight problem arose at the center of the mall as the designated store (Penney's) was a major chain and located at one of the four wings. Elizabeth had to choose the correct wing of three remaining (excluding the one she came in on). There was a momentary delay. A previous-experience component seemed to be involved as Elizabeth used her memory to choose the correct direction.

With extreme ease, Elizabeth navigated the wing of the mall. Upon entering the designated store, it was a fortunate coincidence that the ladies' department was the first section in proximity to the doors. Even though Elizabeth had to hold the articles of clothing and price tags close to her face, she made the correct identification.

Neither sales clerk or shoppers gave any indications that they noticed Elizabeth had a visual impairment. If they noticed, they evidently did not deem her impairment as a handicap. While shopping from section to section seemed laborious, it was also systematic and organized. Only twice was there a communication with salespeople -- one time for directions; the other for finding an article which was possibly in stock, but not on the shelves. In both of these situations, there was no indication that Elizabeth's impairment was recognized.

Elizabeth made the decision not to buy the shirt at which she had been looking. She then decided to go to the pet store and purchase some seed for her birds. Again, I followed her down the mall and toward the pet store. The store was very close to the door through which we entered the mall.

Proceeding directly to the store, Elizabeth entered and momentarily stopped at the puppy display. The fact that the cages were set back from the glass partition would produce poor viewing of the dogs inside. Elizabeth went to the back of the store where there were pet foods. She quickly scooped the seed into the bag. She did this so quickly that she had finished by the time I got into a position to observe.

At the cashiers counter, she paid for the seed with a couple of dollars and some change. Elizabeth concluded the task by leaving the store.

In her shopping task, Elizabeth was able to perform at a high degree of functioning -- far outweighing my expectations. To the average shopper and salesperson, she did not possess or demonstrate any qualities which would reveal her impairment.

Outside of the cashier at the pet store, Elizabeth had two contacts, both initiated by her. Neither recognized her as being impaired. As far as functioning in the designated task, she performed:

- | | |
|----------------------------------|-----|
| a) Locating the store | "0" |
| b) Locating the Department | "0" |
| c) Finding rack with articles | "1" |
| d) Finding size, color and price | "1" |
| e) Did not perform | |
| f) Finding cash register | "0" |
| g) Paying for items | "0" |

GROCERY SHOPPING

For my experience in grocery shopping, I had a list of three items written in marker, and two coupons to use. I would be shopping at Meijer's, a store I was not very familiar with.

I decided to use a side entrance into the grocery section rather than going to the center and then back to the groceries. I had to negotiate a turnstile and then pull a cart out of the rack and around the corner.

My first problem was getting the cart around the edge of the wall. I crashed into the corner, and then had to back up and force it around. I felt a little off balance, and seemed to be having problems with depth perception.

The first item to find was Nutrigrain cereal. I had never bought this kind before, so I wasn't familiar with the color or size of the box. I made my way down the aisle, staying very close to the boxes. I knew that I was probably getting in the way of other people trying to get items off the shelf, but I kept my back to them and concentrated on the cereal.

By holding the boxes very close, I could make out the names. A lot of them were familiar in color, such as the orange Wheaties box, and the yellow Corn Chex box, so I didn't have to pick up all of them. Several of the names were similar to the one I wanted, such as Nutrific.

Finally, I found the right brand, but there was only one box, and it was the wrong flavor. I couldn't find any other boxes, so I decided that box must have been misplaced.

I went to the end of the aisle without finding any more boxes of that brand, so I turned around to look again. This time the aisle was much more congested. I hit a cart parked in the middle of the aisle, and almost side swiped a man. I felt very embarrassed, but I couldn't really tell where the cart I was pushing ended.

Finding the original box I had looked at, I discovered that the rest of the stock of that brand was on the shelf above it. I took a box and headed to find the next item, salad dressing.

I decided that it would probably be most efficient to go up and down every aisle rather than trying to head straight for that item as I normally would. I was afraid I would miss it and become confused.

I located the appropriate aisle after travelling down two or three, and looked at the coupon I wanted to use. By holding it very closely, I could see the brand, the size, and the flavor the coupon specified. I also noticed that the coupon was expired so I could not use it.

The flavor that I wanted was called rancher's choice. I knew the label was green and white. I thought I had the right one, but a closer look revealed that I almost had purchased creamy cucumber instead.

My third item of frozen orange juice was located without any further mishaps. I did feel somewhat self-conscious that I might run over someone with the shopping cart.

Trying to find a cash register, I looked for the lighted posts. I couldn't really tell if the cashier was there, so I went to a lane that had another customer in it.

The only problem I had in paying was trying to find the cashier's hand to put the money in it. I think I came close enough, then she moved to take the bill I offered. I didn't try to count out any change to give her, and I didn't try to count what she had given me back. It seemed right, so I went on my way.

GROCERY SHOPPING

Observation --

This task involved a prescribed number of events generally undertaken when one shops at a grocery store. Elizabeth was to get a cart, read the grocery list (I wrote it in bold letters), find the appropriate aisle and obtain the designated item. After this was accomplished, she was to find the register and pay for the items, using the appropriate denominations of bills.

This exercise immediately followed Elizabeth's mall experience.

While Elizabeth found the carts with little difficulty, I noticed that she had a slight problem maneuvering and separating her cart from the others. This problem may have been attributed to her visual impairment as she did not notice the boundaries of the grocery cart corral. There was no one around at that time, so it was not noticed that Elizabeth was operating under an impairment.

Once that obstacle was overcome, Elizabeth then entered into the store proper. A general knowledge (which Elizabeth has) is helpful in knowing which aisle will house specific items. Elizabeth methodically went down each aisle, locating landmark items and extrapolating that information as to the location of the article she needed to buy.

During this period, she had no verbal contacts with any of the other shoppers in the store. It was also my contention that few people noticed that she was visually impaired even though she held the list of items close to her face.

The interesting aspect of this observation was that while people apparently did not recognize her impairment, there was evidence of annoyance. Her maneuverability with the cart was somewhat less than desirable. Elizabeth, on occasion, came close to clipping other carts as she passed by them.

After all the items had successfully been obtained, Elizabeth proceeded to the register. There seemed to be no trouble with the coupons or paying for the items. On a whole, the tasks were performed with satisfactory ability and there was no indication that anyone was aware of her impairment.

Elizabeth had no contact while in the store. She performed tasks as follows:

- | | |
|--|-----|
| a) Getting the cart | "2" |
| b) Reading list | "1" |
| c) Finding the correct aisle | "0" |
| d) Finding the appropriate size,
brand, and ripeness | "1" |
| e) Finding the register lane and
paying in correct denomination | "0" |

EATING OUT

I chose to eat in a restaurant where neither Joe nor I had ever been to see how I could adapt to new situations. The restaurant was fairly slow, with many empty tables.

I could tell that we were supposed to wait to be seated, and I could make out most of the writing describing the special of the day.

The hostess seated us, and I began to look at the menu. Once the writing was within my working distance, I had no problems reading the items.

The waitress came back and described the buffet of the day. She listed the hot items, and I asked her what kind of soup was available. Because of this, I knew pretty much what to expect even before I got to the buffet area. This proved to be very helpful.

My first trip was to get salad and soup. I could tell what the items were fairly well. I think this was because I had in mind what most restaurants have on their salad bars. I had a little trouble telling if one of the items was bread or a roll.

While I was eating the salad I had made, I had some trouble with depth perception. More than once I set my glass down too hard on the table because I thought it was lower. The biggest problem I had was trying to open the butter package.

As I ate, I felt self conscious. I thought I might be dribbling down my shirt. I was ready to go back up to the buffet, but I didn't want to because a man was there. I decided to go any way to see what would happen.

I was glad the waitress had told me what was on the buffet because I had a hard time identifying the food. The first item looked like a tray of sweet potatoes. But I knew that this wasn't one of the options, so by process of elimination, I decided that it must have been ribs.

I finished going through the buffet then returned to the table to eat my meal. The ribs were the hardest to eat because I couldn't tell the bone or the fat. I felt uncomfortable trying to eat the ribs, so I gave up on them.

I went to the restroom. I was a little apprehensive about trying to find the right one, but this fear proved to be groundless because the doors had the large pictures in addition to the writing. Once inside, I felt a little frustrated when I looked in the mirror. I thought my hair was messed up, but I couldn't tell for sure, and I couldn't fix it to my satisfaction.

EATING OUT

Observation --

This was the third in a series of tasks that Elizabeth was to perform under her visual impairment. Previous tasks had shown a fair degree of functional ability. It became evident that Elizabeth's perceptions came faster and were more accurate. At this time -- after three tasks -- I was surprised and somewhat disappointed that we were not experiencing any reactions from others to Elizabeth's visual impairment (as our hypothesis had originally stated).

In this task, it was Elizabeth's duty to order a meal from a menu and supplement that order by using the salad bar. As she held the menu close to her face, no one noticed. This may have been due to the fact that a large menu hides the proximity of the face to the page.

When it was time to order, Elizabeth chose a buffet special. Close questioning as to the items on the buffet, apparently were not detected by the waitress as a means of (along with tactile color and blur interpretation) identifying the food.

Besides having trouble peeling the wax paper off the muffins, Elizabeth gave no indication of any visual impairment during the course of the dinner. There was no indication even while paying for the bill that anyone recognized she was visually impaired. We began to discount our hypothesis and rethink our position.

The waitress and the cashier were the only contacts made.

Elizabeth functioned exceptionally well in all her tasks:

- a) Finding table and being seated "0"
- b) Deciding what to order from menu "0"
- c) Going through the salad bar "0"
- d) Eating dinner "1"
- e) Paying the bill "0"

DOING LAUNDRY

I entered the laundromat and headed for the rows of washers. It took me a little time to find two that I was sure were not in use. I put my basket on top of them and went up to the counter to buy some detergent.

I asked the woman for two boxes of Tide, and paid for them successfully. However, I must have looked a little confused because the woman asked me if I needed some change, and pointed in the direction of the change machine. I already knew that it was there, but I thanked her anyway.

I got my change, then headed back toward the machines I had picked out previously. After dumping in the detergent and my clothes, I had the idea to make sure the machines were not out of order. Luckily for me, they were working, so I put my coins in and started the cycle.

Usually, I hate to sit and do nothing while doing laundry. Most often, I will read a book or paper while I wait. Because I knew this would prove to be tedious, I planned on doing some errands while the clothes were in the washer.

My first stop was to the Giant Store across the parking lot to return some bottles. I stood at the bottle register for a long time before someone finally came. I felt like all the people were ignoring me, and I wasn't secure enough to ask someone for help, because I couldn't tell who worked there.

Finally, someone came and gave me the slip for my refund. I took the slip and went into the nearest express lane for the money. Because I wasn't buying anything, the cashier told me that I had to go to the courtesy desk for the money. After getting the refund, I was glad to get out that store.

Then, I headed for Revco next door to buy some allergy medication. I was not looking forward to having to make this purchase because I like to read all of the labels on the medicines and comparison shop. I knew what I wanted: a generic Revco brand that had only an antihistamine without a decongestant or analgesic.

I found the right section quickly enough, but I struggled to find the box I wanted within the rows of miracle cures. Because the right medicine was important to me, and because I knew I had to get back to finish my laundry, I decided to ask for help.

First, I asked Joe for help, but we still weren't sure, so I approached the pharmacy counter. I told the pharmacist what I wanted, and he came out to help me choose the right one off the shelf. I felt self-conscious as I held the box close enough to read the dosage. I could sense that the pharmacist was a little surprised, but he covered it well and acted normally.

I chose the right medicine, paid for it, then went back to finish the laundry.

When I walked in, I heard a woman say, "check your washer ma'am." I didn't even consider the fact that she could be talking to me. I assumed she was addressing someone else, but when she repeated it again, Joe covered for me by saying, "Thank you." Only then did I realize she was looking at me.

Because I had put two pairs of tennis shoes in with my clothes, the load had become unbalanced and stopped washing. The woman had been trying to tell me this, but only after I saw it for myself could I realize what was going on.

I straightened out that load, then put my other clothes into a cart to take them to the dryer. Again, the same woman said something, but again I wasn't paying attention. Joe interrupted me to tell me that the woman had been trying to tell me that I could put my clothes in the dryer she had just finished because it was still hot.

I felt confused because I couldn't tell where they were pointing or who they were talking to. I also felt bad because this woman was trying to be nice and I was ignoring her. But, I loaded the clothes and moved on.

I had two dimes and a nickel that I wanted to make into a quarter, so I went back to the counter to have the clerk make change for me. I stood up at the counter for a long time waiting for the clerk to help me. I stared straight ahead at some piles of laundry to be dry cleaned. Suddenly, what I thought had been a pile of laundry got up and walked to the counter. I realized that I had been staring straight at the woman who worked there for about two minutes.

I felt very embarrassed, but I tried to cover it up as I asked for my change. I don't think the woman was too pleased with my rude behavior.

Once I had both loads set in the dryer, my allergies started bothering me. I felt miserable as my eyes itched and burned, and tears streamed down my cheeks. I decided that I had had enough of these contact lenses, so I took them out and finished as my normal myopic self. My visual acuity uncorrected is only about 5/400, but I definitely noticed a big improvement.

Previously, I had thought that if you couldn't read the "E" on the eye chart, your vision wouldn't really seem much worse. I thought that there was little difference between a five diopter myope and a ten diopter myope. Now I realize that this couldn't be further from the truth. I can appreciate how a low vision patient may be more sensitive to a decrease in vision than I had thought.

I finished folding my laundry without any other major problems. This was undoubtedly the worst experience I had while simulating visual impairment. I felt very inept and very confused.

DOING LAUNDRY

Observation --

Elizabeth had been to this laundromat previously. I, therefore, assumed that she would be familiar with the setup of machines and dryers. She walked through the front doors and to two open machines with little problems.

She did not sort out her clothing, but filled the two machines haphazardly. I don't believe she did this because she was visually impaired. This, more or less, looked like the way she usually did laundry.

She then had to purchase soap from the front desk. Walking directly to the counter, she removed money from her wallet to pay for soap. It looked like Elizabeth asked this lady where the change machines were. The lady pointed toward the dollar changing machines which are right beside the counter. This was the first true indication that someone had noticed her impairment. As Elizabeth walked away, the lady at the counter watched her closely. There was a puzzled look on the counter lady's face as if to question how Elizabeth could have difficulty with her money, yet be able to walk around without stumbling over objects.

Elizabeth was watched until she returned to her washer, then the lady dismissed the interaction. After Elizabeth had started the washer, she decided to return bottles to the grocery store next door.

We walked over to the store and went inside. Having been in the store before, I believe Elizabeth was aware of the area to return her bottles. If she did not have prior knowledge, she may have heard another shopper returning bottles. Either way, she moved directly to the return basket. There was another person standing beside Elizabeth, but no salesperson has come to help them. Knowing Elizabeth's personality, I would have expected her to locate a salesperson. It was then my perception that she could not see the girl at the counter, not 10 feet away.

The person who was also waiting, went over to inquire of the counterperson who then came over to help them and to count their bottles. When Elizabeth received her money at the counter, she held the coins very close to her face in order to count them. The look on the face of the counterperson was of disgust. It was as if she did not comprehend the situation.

Elizabeth's ability to be mobile precluded any possibility of her being visually impaired (at least in the mind of the counterperson). Elizabeth was watched with a look of contempt as she exited the door.

The next stop was the drug store so that she could get an antihistamine for her allergy. Elizabeth was looking for a special store brand. She held the boxes close to her face to read the directions. After a period of time, she asked me for help. I couldn't find what she wanted either. It was then we asked the pharmacist for help. He was more than willing to help.

When Elizabeth held the box close to her face to read the ingredients, the pharmacist showed a momentary look of surprise. Just as quickly, there appears an expression of understanding. He then went about his business. After paying for the medicine, we returned to the laundromat.

As we entered the laundromat, a voice called out. It took me a moment, but I saw a lady directing her attention toward Elizabeth. Elizabeth was still unaware of what was going on. While she may have known a voice was trying to get someone's attention, she did not realize this lady was talking to her.

In order to alleviate an embarrassing situation, I interceded and let Elizabeth know the lady was talking to her. The lady was explaining that Elizabeth's machine had stopped because the load was uneven. I thanked the lady and Elizabeth continued to do her laundry. I think she was embarrassed by this interaction.

After the washing cycle was finished, Elizabeth removed her cloths and searched for a dryer. It was my contention that the people close to Elizabeth's area had an indication that she was functioning under some sort of impairment. I couldn't say they perceived it as visual, but they were becoming more accommodating to her needs.

There was a woman calling to Elizabeth about an open dryer that had recently been used. This time Elizabeth somewhat acknowledged that she was being spoken to. She failed to understand the nature of what was being said. I, therefore,

intervened to eliminate the possibility of this woman being offended.

Elizabeth deposited her laundry in a dryer. Finally, she decided the frustration and discomfort was too much to handle, and we removed the lenses.

This was the first experience that I saw so much social interaction involved with a task. Functionally, in the laundromat Elizabeth would have done well if there would have been fewer people around. From a social aspect, she failed terribly and would have offended quite a few people if I had not been around.

In this situation, I had to include my intervention as a contact. Therefore, six direct contacts were made in this experience. Only two were initiated by Elizabeth. Her functional assessment is as follows:

- | | |
|---|-----|
| a) Sorting the appropriate loads | "0" |
| b) Adding proper amount of detergent | "0" |
| c) Setting cycle | "0" |
| d) Getting change and putting it in
the machine | "0" |
| e) Transferring clothes to dryer and
adding change | "2" |
| f) Monitoring dryer | "2" |

EATING OUT

It's approximately 1:00 in the afternoon, and I was more than a little hungry. I was sitting in my car with aphakic contact lenses on waiting for Elizabeth to position herself in Wendy's. As I looked out the window, I could only identify the forms of people moving near my car, passing automobiles and buildings that were silhouetted against the sky. A thought ran through my head -- what if this was my permanent vision? With the impairment, the love of fine detail had new relevance. That which before was taken for granted suddenly had become of great importance. Even though I knew that the impairment would only exist as long as I allowed it to, frustration began to build, and I became somewhat depressed.

I crossed the parking lot and headed toward the restaurant. It's strange and quite dangerous how the cars converge out of a mosaic-like fog. In a sense, it reminded me of the Indian's dreams in "One Flew Over the Cuckoo's nest. In reality, this was not a dream and nonfiction was written across the bumper of the car bearing down on me. I quickened my pace, thus I avoided becoming a bizarre statistic -- man killed wearing aphake contact lens.

Entering the restaurant was easy as my many years of gluttony had established a visual memory of the layouts in all the major fast-food chains. Up at the counter, I ordered the super bar which eliminated the necessity to read the menu (which I couldn't see).

I received my tray at the counter and proceeded over to the super bar. I know, from experience, that the first section contained pastas and bread. By color, I identified the bread. And using the tongs, I placed a piece on my plate. I then tried to identify the pastas. I decided upon a green/white mixture which I supposed to be spinach pasta and regular pasta combined. It turned out to be broccoli and pasta. Searching for an area on my plate (which was sectioned) to place the pasta presented a problem. I discovered the plate had been given to me upside down! Now, my bread was perched on the back side of the plate.

There were people behind me in the line, and I was sure they were conscious of my actions. I asked if they would like to go ahead, but they most graciously refused. In a sense, they were being accommodating to my impairment, and I appreciated it. Yet, if they had moved ahead I would have felt less apprehensive about trying to hurry.

To give myself a bit of time to evaluate what I was putting on my place, I skipped a section, putting a large space between me and the next group of people. It was now the "build-your-own Burrito/Taco" section. It was relatively easy to function in this section as I could detect the items either by color or shape. The burrito was the large round stack.

Separating the tortilla shells, however, was difficult so I took two to save time. From there I piled objects in the middle of the burrito. (Without any tactile response, it was difficult to identify where the middle of the burrito was, as the plate was the same color as the burrito.) Ground beef is dark brown, tomatoes red, cheese orange and sour cream is white. I quickly piled these on. After creating such a masterpiece, I had to attempt to eat it.

At this point, the usual joy of eating has turned into a banality of consumption. Before this day I had not realized to what degree vision played in my appreciation of food. As I ate, it was with great effort. There was difficulty in cutting my food into small enough pieces to fit into my mouth. After a short time, the pieces I was putting into my mouth were getting significantly larger. I didn't care how proper I looked -- my desire was to finish what was on my plate.

To the best of my knowledge, I succeeded. I was still not full, so I had to decide whether to return to the super bar or accept defeat as well as the realization that I had not gotten my money's worth. I returned to the super bar. This time I planned to get pudding and another burrito. I got the burrito. It was easier than before. I located the tortillas with little problem. Thus encouraged, I decided to put pinto beans on my burrito.

There were two containers with very similar looking substances. I spent at least a minute and a half spooning each container. Just as I was relatively sure which container had the beans, someone emerged from behind the counter, took the tray, and disappeared back into the fog. This was extremely disheartening. Prior to this moment, I was encouraged by my ability to discern what tray the beans were in. I waited momentarily, hoping the tray would return, but it did not. Therefore, I prepared my burrito much the same as the first.

From a previous visit (without being visually impaired) I knew that the caramel pudding was in the salad portion of the super bar. I also knew it was in a container along side the dressings, salads etc.

There was a man with me at the bar. At this time, I believed I was functioning at a level that would not indicate any visual impairment. Once again this feeling was short lived. I had reached an impasse. There were two containers with food of the same color and consistency. I thought one must be a cheese sauce, the other the pudding. I had a fifty-fifty chance of being correct. I decided to better my odds.

Spooning the container I felt most likely to be caramel pudding, I nonchalantly (in a half joking manner) asked, "Is this pudding?" The response I received was, "it should say on the spoon." Normally, this would not have been a problem. In any other situation, it would have been easy to hold the lettering within the focal point of the lenses. For sanitary reasons in this case, it would not have been proper to hold a spoon to my nose. I was now confused as to what was my next option. The bewilderment must have shown on my face. It was my impression that this man now mistook my impairment not as visual, but educational. He said, somewhat sheepishly, "The spoon says pudding." He thought I was illiterate.

It was remarkable that the more highly functioning I was, the more likely I was to induce negative misconceptions in need-help situations. If I had been overtly incompetent, with a white cane, it would have been interesting to see how accommodating this man would have become.

My mind transferred back to the task at hand -- knowing which container had the pudding. I placed some on my plate and returned to my seat.

Elizabeth was laughing at me. As I stated before, the burrito tortilla was the same color as the plate. With all the

effort to get the pudding, I had placed it in the middle of my burrito! This was the final straw. I finished eating. My only desire was to get those lenses out. We got to the car, and I ripped the lenses out of my eyes. Suddenly, the world was new again; my vision was clear. I contemplated my experience, my level of success and failure, the ever-present frustration. Still I can never understand the emotions experienced by a person with a true visual impairment mainly because consciously I knew my impairment was temporary.

EATING OUT

Observation --

I entered Wendy's and took a strategic seat where I could observe the salad bar. It was noon hour, and the restaurant was very busy. Almost all of the seats were taken.

I watched as Joe navigated the "maze" to wait in line to place his order. He seemed to be functioning very well, and showed no problems in ordering and paying for his meal.

Joe looked a little confused at the start of the buffet. I could see the man behind him say something to Joe, and then Joe laughed. I don't know what was said, but the man seemed to be making a joke.

Joe moved through the buffet fairly slowly. No one seemed to be pushing him to go faster, but a girl did cut in. Joe held his plate out to the serving utensils, rather than bringing the utensils to his plate as most of the others in line did.

At the end of the line, Joe circled around and began searching for a table. He appeared to be looking over the area, rather than directly at the tables. He began to walk past, then recognized me and sat down at the table slightly awkwardly.

As Joe began to eat, it appeared that he was having some trouble localizing the food. Joe solved this problem successfully by using a knife to scoop the food on the fork. He was fairly successful, but somewhat messy.

As we ate, I began to ask Joe questions about his performance. I asked him about the degree of difficulty of the tasks, how he was feeling, and how things looked to him.

The woman eating with her husband next to us appeared quite interested. I don't know if her interest was sparked by overhearing the conversation, watching Joe eat a little bit unorthodoxly, or some other reason. She made no attempt to say anything to us, but she did seem to notice that something about Joe was different.

As Joe ate, his napkin slipped from the table and began to fall over the edge. I was slightly surprised to note that my impulsive reaction was to reach out and tuck the edge back under his plate. I felt compelled to help him in a way I probably wouldn't have under normal circumstances.

During Joe's second trip to the salad bar, he stopped completely at the puddings. I watched as he seemed to be testing the consistency of the butterscotch pudding by pulling the ladle in and out. He exchanged words with the man behind him, and the man seemed a little reluctant. I wondered what was going on. It would be easy to mistake the pudding for salad dressing or cheese sauce. Joe was not successful in using the pudding appropriately.

In grading the task performance, I would count four encounters, three of which were initiated by the other person. The three are the man at the salad buffet the first time, the woman seated at the next table, and myself when I felt compelled to help with the napkin. The other encounter would be with the man at the salad bar the second time.

Breaking down the individual tasks, Joe performed at a "0" level in finding the table, ordering, and paying. He performed at a "1" level in eating and going through the salad bar the first time, and a "2" level in going through the salad bar the second time.

SHOPPING

I don't like shopping to begin with, and to be visually impaired while shopping was not a special treat. This was my second visually impaired experience. My previous experience allowed for increased confidence in subsequent endeavors.

I entered the mall through the parking lot entrance off Sear's. The objective was to buy a tie from Hudson's and then proceed to the record store. Thus, I had to find my way out of Sear's. There was a corridor across the store which I followed, hoping that it would lead to the main entrance to the mall. I was wrong. I found myself in the corner of the store. Logic and a general knowledge of the mall indicated that if I turned left, the entrance to the mall should be near. I was correct this time.

Entering the main body of the mall, I dropped in line with the main flow of traffic going toward the center of the mall. I was not having any problems maneuvering around the fountain and benches. I was surprised that elevations and ramp were delineated by colors. Whether this was intended as an aid for the visually impaired, I cannot be sure. I know it was useful in my situation.

Without incident, I found my way to Hudson's. Finding the Men's Department was easy as I had been there previously. A problem arose when I tried to find the tie section. I wandered around through the suits and socks for about five minutes. Small items had to be within two feet in order to get a perception of shape and identity. Quite by accident I came across a series of tie displays. Each display had three ties of a different color. So nicely were these set up that I believed these to be a permanent display. I investigated the patterns of the ties by holding them close to my nose. I was not aware of anyone watching.

Deciding upon the tie I wanted, I searched for the stock tie rack so I wouldn't have to disturb the displays. After much searching (with no success) I decided to ask someone at the counter. There were two people behind the counter, but I could only identify that there was one. Directing my question to the person I saw, I was answered by a salesperson much closer to me. She seemed annoyed either by the question or possibly that I unknowingly ignored her. Her answers were short. While her directions were helpful, they inferred incompetence on my part.

I got the tie and returned to the sales counter. The bill was just under fifteen dollars. I used a twenty and received my change which was a bill and some coins. This was convenient as I quickly looked at the five and felt the coins to make sure the count was correct.

I exited Hudson's and headed toward the record store. It was easy to get to the record store. I was almost shocked at how well I was doing. The music was blaring in the store, so it was a good indicator that this was where I wanted to be. There was a sign above a bin of compact discs. I was drawn over to investigate.

The discs were of old jazz artists -- I was excited. The prices are less than half of the normal cost. I began to search through the bin, hold each disc up to my nose in order to determine the artist, title and songs. I saw so little at a time that I soon became frustrated. I moved on to the cassettes and momentarily tried searching through this pile. I experienced the same sense of frustration. I was now dejected. I wandered around the store for a few minutes and left. I think this was the shortest period of time I ever spent in a record store.

I made my way out of the mall and back to the car. I sat in the car, still with the lenses on. Surprisingly, I felt secure. It was safe there. I didn't have to drive the car. All I had to do was relax. Shopping with an impairment was stressful. It is only realized when one stops. I can now understand why visually impaired people who could function in this type of environment tend to avoid shopping. It is far less stressful to be at home.

SHOPPING

Observation --

Joe began his trip to the mall by entering through the Sear's store. The mall was extremely crowded on this day. People were everywhere as Joe entered the store.

Joe had to find his way out into the mall from Sear's then make it to Hudson's. He did very well weaving in and out of the multitude of shoppers, but he turned and looked over his shoulder several times. It seemed to me as if he were trying to make sure that I was following him.

He had some difficulty in leaving the Sear's store. He began to head down a dead-end aisle, but realized his mistake almost immediately and was able to correct his path to successfully leave the store.

Once in the mall, Joe was very successful navigating directly towards his goal of Hudson's. He seemed confident and showed no signs of difficulty.

Almost directly in front of Hudson's, a stage and runway were set up for a spring fashion show. It had not yet begun, but a crowd was gathered around the area and sitting in folding chairs.

Joe stopped to look at what was going on. He seemed slightly puzzled about exactly what the setup was. He watched for a short time, then moved on into the store.

Joe seemed to wander a bit instead of moving directly to the department with the ties. On the way, he passed a woman with cologne samples. I watched as Joe stopped, accepted the sample and exchanged a few words with the woman. He carried himself very well from what I could tell, and no one seemed to notice anything different about him.

Once reaching the department he wanted, Joe began examining the ties by holding them at a very close working distance. I felt as if more people were noticing me standing in the men's department looking conspicuous than were noticing Joe holding ties up to his eyes.

The saleswoman in that department asked two other people, then myself if we needed any help. She did not approach Joe, who was less than six feet away. Instead, she went back behind the counter.

Finally, Joe went to her for help. She seemed to answer him rather briefly, then left, leaving another clerk to ring up the sale.

Joe completed his task, then left, heading for the record store. He was able to negotiate through the crowds very well. Once inside the store, Joe began looking at some compact discs on sale. He was standing close to the store entrance, holding the C-D's close enough to read the titles.