

Form vs Function – A CPTED Fine Tuning

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Most Crime Prevention Through Environmental Design or CPTED (pronounced sep-ted) practitioners are function oriented. They are taught the importance of function by understanding that crime and loss are the by-products of a function that's not working properly and in order to minimize crime and loss they must, as their underlying objective, help various disciplines do a better job of meeting their primary objectives.

Understood, yet often left out of this equation, is a sufficient emphasis on form. Common to both CPTED trained and non-CPTED trained designers of institutional buildings, is a limited emphasis on form or aesthetics that often results in an unnecessarily sterile, yet user friendly environment.

As an active CPTED practitioner, I found myself comfortable with this bias as I had been responsible for a number of very successful CPTED applications which invariably emphasized function over form. It was not until I met an environmental consultant, with strong CPTED instincts, that I suspended this bias so that I could better reconsider form.

The Potential Of Form, From An Artist's Perspective

As one who teaches CPTED to others, I am well aware of the impact that different colours, light, textures etc. can have on people. Reds, for example, can create stress and discomfort by increasing blood pressure, respiration and frequency of eye blink while blues generate the opposite effect. As important as these effects are in understanding basic man/environment relations, a full appreciation of these interactions requires the instincts of an artist.

Hendrikus Bervoets is a practicing artist and president of Bervoets Environmental Consulting Ltd. in London, Ontario, Canada. Bervoets was hired by the City of Mississauga to make-over the Mississauga Valley Community Centre, a large, problem-plagued recreational centre that was the scene of much criminal activity including an exceptionally costly break-in where vandals attacked the building. It was during one of his site visits where I first met Hendrikus.

A Lesson In Respect, Caring And Form

Meeting with Hendrikus was a lesson in respect, caring and form. Not only is it his fundamental desire to create a space “that asks for respect”, but it is also his belief that user groups be “involved” in the process and always kept in mind.

The development of his philosophy was strongly influenced by his early work in a hospital setting. It was during this time that Hendrikus noticed that people suffering from Alzheimers, a specialized form of dementia, spent the last days of their life in a totally “inappropriate”, institutional setting.

This is best understood when one considers that Alzheimer patients suffer from short term memory loss yet are fully capable of remembering details from their distant past. This routinely results in a high level of confusion, frustration and anger when Alzheimer patients are unable to access their short term memory to orient themselves to new surroundings.

By thinking about space and how to make it pleasant, Hendrikus realized that the use of conventional short term memory aids, such as colours and symbols, could be significantly enhanced by associating individual rooms with locked hallway display cabinets containing personal memorabilia.

Building on these experiences, Hendrikus was drawn to other institutional settings where he could “beautify a building where people don't expect it” and in the process “create a really fabulous space”.

One of his most noteworthy projects occurred in his adopted hometown of London, Ontario. There he became professionally involved in what is the world's largest Boys' and Girls' Club, with over 6,000 members. No stranger to this type of organization, Hendrikus has been associated with the Boys' and Girls' Club of Ontario for over 13 years, 5 of which he spent serving as its president. In what is typical Bervoets fashion, Hendrikus left an impact on both organizations.

As President of the provincial board, Hendrikus noticed a complete lack of representation by youth on the Board of Directors. As Hendrikus believed that it was important for youth to be part of the decision making process in any

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organization which served them, Hendrikus began to address the problem by inviting youth to sit on the Board and as many committees as possible.

Today, a large percentage of the Boy's and Girl's clubs throughout the country have adopted this as common practice.

As an environmental consultant and artist, Hendrikus used his talents to beautify the local club. Using the philosophy he had developed, Hendrikus used four tones of selected paint colours, wall graphics and the development of a creative exercise area to provide the space “with what it needed”. The result; a respected environment which is best appreciated through the comments by Donald L. Donner, the manager and Executive Director of the Boys' and Girls' Club for London, Ontario:

“The respect for our building is unbelievable and something I would not have thought, as possible years ago when I first started managing recreation facilities. The art, colour combinations and decorations have been blended together in a creative way that fosters a family home type feeling. People are always consulted in a creative way that fosters a family home type feeling. People are always consulted for their input and have a chance to see, feel, and have hands on involvement in the changing of their environment. They believe it is their home away from home and they have some ownership.”

Indeed it is Hendrikus' intention for a child to feel that “this is my place” where they might not otherwise have “a happy family environment”. By asking for their input, Hendrikus meets their physical and emotional needs by “giving them something more than their own environment, an environment that asks for respect”. It is in this way that Hendrikus acknowledged the “insufficient attention given to youth”, understands their “massive inferiority complex” and avoids the “mistakes of other adult designers”.

Hendrikus' buildings also benefit from a lack of garbage or vandalism. Mr. Donnelly explained:

“I have been here nineteen years and have seen little miracles of attitude and behavioral change. These changes have occurred amongst people who generally do not care about their own low income housing development and public property in general. For some reason they care about this Club in a personal way. It is evident in the lack of graffiti, vandalism and general respect shown toward the building, staff and volunteers”.

As Hendrikus proudly points out, the building has received little or no graffiti since its make-over 13 years ago--this in a city that is now experiencing a marked increase in graffiti.

The fact that there was little or no vandalism and graffiti actually does not surprise Hendrikus, who believes that “the better a building looks the better it will be treated” and that people who vandalize buildings have “no respect for something connected to it”. Put a different way “the nicer the space is, the less it will become dirty or wrecked”.

Perhaps no statement captures the essence of Hendrikus' success better than one from Mr. Donner's letter. The statement, attributable to an anonymous teen at the recreation facility, said “Don't mess up my facility or I will be in your face”.

While aggressive in its nature, the statement clearly demonstrates a significant ownership interest. It is this strongly developed and broad based sense of ownership that keeps this facility safe.

The Mississauga Valley Community Centre

Hendrikus' basic objective at the Mississauga Valley Community Centre was the same as the Boys' and Girl's club. He wanted to give people a “better, more respectful environment than they would otherwise get” and be “fiscally responsible doing it”.

To accomplish this Hendrikus once again talked to “staff, kids and listened really well”. By asking questions such as “What do you really need?” and “How do we get people from “a” to “b” in the best fashion with the least frustration?” Hendrikus came to know the building, the people and their likes and dislikes.

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By the time I met up with Hendrikus, some of the changes to the Centre had already been done. One of the first locations to be made over was the main floor washroom. Hendrikus purposefully chose the washroom as his first location since he believed that if you didn't make a washroom “look especially good” it could be “the catalyst for anything to happen.”

Amongst the changes planned or made to the washroom were a four tone, painted colour scheme; the replacement of the metal door vents with less easily vandalized wooden slats; the painting of a wall graphic and bi-hourly, maintenance checks. Of all the measures Hendrikus spoke of, the most critical was maintenance for as he had earlier observed in “most cases nobody was checking, so that's where people take it”.

Changes were also made to the cavernous lobby. There, Hendrikus painted over a large, one-dimensional, wall graphic that hid the interesting architectural features located in front of the Arena. By using tones of the same colour, Hendrikus replaced the high stress red, orange and yellow colours of the wall graphic with a much less stressful colour that accentuated the building's bump outs, jogs and indentations and coordinated it with the Arena's interior.

He then turned his attention to a large concrete protuberance which represented the edge of the second floor level where it wrapped itself around the open, foyer space. There, Hendrikus created a series of brightly coloured, yet inexpensive, plywood squares that were permanently attached to the concrete's edge. This not only enhanced the space but provided relief from the poured concrete surface.



Before



After

Perhaps his most interesting challenge was the teen room. It was here, in a windowless room, painted battleship grey that I spent the most time with Hendrikus. Entered by two solid metal, purple doors, the room was lit by fluorescent light fixtures. Hanging from its walls and structural columns was an overabundance of bulletin boards and tacked on pieces of paper which Hendrikus described as lacking “permanence”.

While Hendrikus described the room as being “O.K. to a whole lot of people” he noted the “space doesn't create any self-respect”. Indeed, the furniture was an assortment of high-stress, yellow, stacking chairs constructed of fiberglass and upholstered, orange chairs and couches. These were complemented by a number of well worn game tables that were covered with worn plywood covers that “looked like garbage”. A mish-mash of tables, styles and storage cabinets rounded out the room which Hendrikus' collectively described as “not looking together”.

To correct these problems, Hendrikus met with a group of youth in which he introduced himself by first name. Hendrikus brought colour charts to the meeting and asked the youths to “think about this space, for a time”. Hendrikus explored the most appropriate treatment for the walls including creating “some walls that looked like walls, where graffiti could hang as “panels””: By using Hendrikus' concept of “taking graffiti off the walls and turning it into art”, a staff-member expressed the hope that people would understand where graffiti was meant to go.

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Sharing his philosophy, Hendrikus told the kids that “I believe when you have a space it is your space”. He followed this comment by asking “are those the right games for you?” After spending more time, which included enduring a false fire alarm, Hendrikus concluded the meeting by promising to get the group together next week after everyone had the time to think about what to do.

As the meeting concluded, Hendrikus and I walked around the room and building. Sharing ideas freely, Hendrikus stated that “from the teen's perspective, he liked the basement look” of the room however the room needed to be “brightened up”. Hendrikus intended to accomplish this by changing the colour of the purple doors and gun metal walls which he unflatteringly described as “far too massive” and “depressing and bland”.

On the subject of furniture, Hendrikus was in favour of replacing it noting that if you wanted to reduce stimuli you should take the yellow and orange furniture out. He qualified this statement by saying, this doesn't mean you wouldn't use orange or yellow, but if you were to use it, you would use it in “very small” quantities so as not to affect people.

On the subject of posted paper announcements, Hendrikus was emphatic that he didn't want “loose pieces of paper placed on the wall”. Hendrikus stressed that “whatever was put on the walls, needs to look “classy”. This would require the paper to be “framed, laminated or mounted to increase respect for the building and improve self-esteem on an on-going basis.”

On the subject of bulletin boards, Hendrikus believed that they should use the same colour scheme as the rest of the room. Hendrikus also stated that the bulletin boards “should be He right size” to provide only for the space that was actually needed.

Hendrikus had a number of other ideas including the possible replacement of the fluorescent lights with spotlights controlled by dimmers. Regarding the rest of the building, Hendrikus noted the “monstrous” and stimulating use of yellow in the daycare centre and that paper notices in the day care were posted at adult eye level.

Perhaps no piece of advice better sums up Hendrikus' use of colour than his belief that colours should be selected “by need and not by taste”. For instance, if you wished a small space to feel as large as possible, such as the space within a home, the walls should be painted as light as possible. If, on the other hand, you wish a large space to look full and compact, such as the space within a dance club or bar, the walls should be painted dark.

Colours should also be chosen according to the need for stimulation. For instance, the use of stimulating colours, such as red, orange or yellow, may be inappropriate for a classroom or psychiatric setting yet may be exactly what is needed where stimulation is required and motivation is generally low. A typical setting having these requirements is an occupational therapy department.

What Does This Mean For CPTED?

As a CPTED proponent, I was very pleased to see the large number of similarities between Hendrikus' very instinctive approach which emphasized form and the more formalized teachings of CPTED. Comparing the approaches, I found we shared a number of beliefs including:

- the importance of thinking about space and the propensity for asking questions,
- the desire to ask users of a space for their input and to design a space according to their needs,
- the desire to improve the functioning of space,
- the need to consider people's metabolic reaction to the environment,
- the need for proper maintenance, and
- perhaps most critical of all, the need to develop strong, broadly-based feelings of territoriality or ownership.

I also found that Hendrikus' approach fit well with the James Q. Wilson's Broken Windows Theory.

Despite these similarities, there are lessons to be learned. Primary amongst these is the benefits a fine-tuning of CPTED's function vs. form bias could bring.

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As Hendrikus had showed us, his emphasis on form worked “really well” in such traditionally institutional settings such as health-care and recreation centres. As both these settings inherently emphasize function over form, one can argue that the application of function emphasizing CPTED principles will only further develop function without properly addressing form. Described as if it were a medical problem, it is not unlike a Doctor who adjusts the dosage when a review of the medicine is required.

While conventionally applied CPTED principles may be totally appropriate for less institutional settings such as shopping centres, where form is already strongly emphasized, the traditional CPTED bias may miss a number of opportunities in settings where form is already weak.

This is precisely what happened when I conducted a CPTED review of the very same recreational facility in November 1994. Reviewing my four page report, I did not once comment on “aesthetics” or form. Instead, I conducted a relatively thorough assessment of the most “public” areas of the facility including the parking lot, grounds, picnic shelter, courtyards, main floor hallway, lobby and second floor landings and stairwells at all times emphasizing function. While this resulted in a noteworthy move of a large number of problem-plagued, vending machines to an area that could better support them, it failed to capitalize on a single form opportunity as recognized by Hendrikus'.

Lessons To Be Learned

It is important as CPTED practitioners that we make a better effort to consciously remember our function-oriented bias particularly as it relates to function emphasizing, institutional settings. By remembering our bias and determining the nature of the facility we are dealing with, it is within our power to fine-tune the application of CPTED to capitalize on the opportunities presented by both function and form.

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