



Passing On The CPTED Methodology To The Community: The Chilean And Latin American Context

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Introduction

Chile and the process of Urban Reform

Chile, as a developing country, has gone through a strong urban development and economical growth, which in turn has brought an explosive urban growth. The strong growth of many cities brings a challenge to urban planners and legislators to create urban conditions that allowed a sustainable development to provide the inhabitants a higher quality of life.

The main purpose of the Chilean Government when starting the Urban Reform was to reorganize and improve the urban management from the public sector, creating planning and development instruments which include three main key concepts.

- Citizens participation
- Urban safety
- Universal accesibility

These key concepts focus on getting safer and friendlier cities.

Within this frame of reference, the CPTED strategy (Crime Prevention through Environment Design), is accepted as one of the instruments of the Urban Reform, since it considers the important aspects of citizens participation, and environmental safety.

In the year 2000 CPTED arrived in Chile, based on the experiences of countries such as Canada and the USA, with a methodology suited to satisfy the needs of those countries, but not necessarily useful in the Latin-American social and cultural context. As a result of that, the working materials produced to set up a CPTED program within a community in those countries are used only for referential purposes, and the need to adapt them to a local reality is an immediate task for the CPTED practitioners in Chile

One of the main challenges in working with a methodology created under a foreign social and cultural context, is passing on to the participant community, the necessary information in an effective and efficient way.



*Proceedings of the 9th Annual
International CPTED Conference 13-16 September 2004*

Because of this challenge, the need to structure and organize the CPTED information in a simple and effective way, so the application of a program in a community is done in a way that is effective, fun and useful for the required purpose comes to life,

Producing informative materials to teach and work with CPTED, such as Manuals, flyers, interactive audiovisual systems is an undertaking that involves a great challenge. The production of the manual “Espacios Urbanos Seguros” (Safe Urban Spaces), by the Ministry of Housing in Chile is the first step in this task focused on the creation of a methodology according local socio cultural conditions.

Production Of The Manual

Interdisciplinary participation

The first step in the production of the manual was to recognize that it is a task that required the participation of a interdisciplinary team, since it involve aspects of different order

- Urban issues and architectural design, relate to architects and urban planners
- Social and community issues, relate to social workers and social psychologists
- Legal matters, relate to lawyers

According to this criteria, a team was created composed of four architects (Ministry of Housing and Urban Planning), one Social Worker, one Geographer (Ministry of Interior), two lawyers (Ministry of Interior and Fundación Paz Ciudadana), and one Socio Cultural specialist.

The interaction of the different professionals allowed the organization of the generic CPTED concepts, and summarize and group them into three main categories:

- General Concepts
- Design recommendations
- Citizens participation

A difference to what happened in other countries, Chile’s CPTED is strongly led by architects, which allows for a strong focus in the methodology for the application of new urban and architectural projects as well as existing ones.

The User

CPTED is a methodology which involves professionals of different specialties(for example, urban planners ,lawyers, social workers, architects, psychologists , police members, health practitioners) and considers a strong community participation, therefore it has to reach users of different socio cultural and technical levels, and ages.

The different kind of users makes it necessary to develop working materials easy to understand for all of them, but at the same time must be strong in technical aspects.

Basic Structure of the Manual

The manual is organized in three main points:

General Concepts



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Definitions

This section shows a summary of concepts with basic technical vocabulary that will allow the users to handle terminology that sets the necessary foundation to understand the CPTED concepts. The concepts are written in a simple language to be easily understood by the specialist as well as the non trained person from a participating community

The main concepts are:

- Citizens Safety
- Delinquency
- Fear of Delinquency
- Victimization

Relationship between urban space and urban characteristics and delinquency

This chapter is of great importance, since for the first time in Chile, it officially established the relationship existing between urban design and the prevention of certain kind of opportunity crime. This concept opens the door to possible changes on the building and urban norms, laws and regulations in Chile.

This chapter also shows the necessary technical definitions for a good understanding of the developed material:

- willing aggressor
- Target
- Crime
- Context
- Crime opportunity
- Urban space and environment promoting opportunity crime
- Natural surveillance

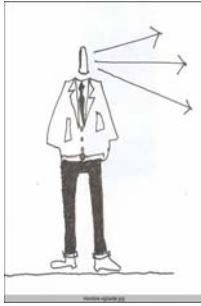
Crime Prevention through environment design to increase the perception of a safer environment

The basic concepts to be considered:

- Promote natural surveillance
- Promote natural control of access
- Reinforce identity with the public space
- Design and planning of neighbourhoods in a small scale
- Proper administration of the public space

Design Recommendations

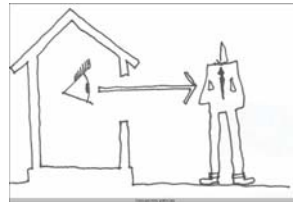
This chapter is organized from the point of view of an individual walking through the city and passing by different urban situations



It is important to highlight the importance of the “learning to see” concept, a process that involves walking around, observing, analysing, understanding, and finding solutions to urban and environment observed problems.

The action of “learning to see, allows one, to “read” the urban space, which helps to identify the architectonic and environmental conditions to create conditions to promote opportunity for crime acts, as well as to see those elements and conditions that help to support safety conditions

Therefore, learning to identify entrances, observation points over the urban space, safe routes, and signs, could be a great help to spot problems in the urban space as well as finding solutions when the urban space doesn't feel safe.



The relationship between the interior and the public space

It is important for the urban analysis to relate to safety conditions, the relationship existing between the buildings and the public space. The manual uses plenty of illustrations to show and demonstrate the different kinds of relationships between the buildings and the surrounding space

Methodology used to develop the manual

General structure

The methodology used to develop the manual considers a general structure used in the different areas of analysis. The main considered aspects are:

Definition of the area of analysis

The manual gives a conceptual definition of the area to be analysed. This definition allows an open and clear communication about the matter, even when the participants could have different levels of technical knowledge or cultural levels.

Detected problems

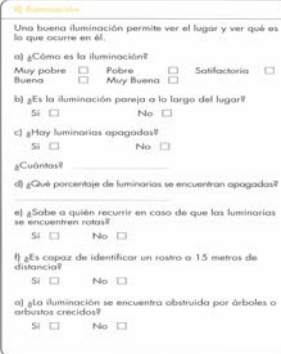
A summary of the most common problems related to the study area are shown in the manual. There is a basic set of aspects to be considered in the analysis that follows. The elements listing the problems in the manual can be adapted to the local conditions of the analysed area.

Recommendations

The recommendations are shown only as a reference to be considered as potential help in the search of solutions to the detected problems. They are not presented as the only and best way of solving the problem, but as a starting point and inspiration.

Check list

This list is presented as a help to be used as a guide in the process of observation of the urban space. By using the check list, important and relevant elements can be observed, so basic things are not overlooked. The check list is a good help to determine if the analysed place has the necessary conditions to be considered a safe place.



3) Iluminación

Una buena iluminación permite ver el lugar y ver qué es lo que ocurre en él.

a) ¿Cómo es la iluminación?

Muy pobre Pobre Satisfactoria
Buena Muy Buena

b) ¿Es la iluminación pareja a lo largo del lugar?

Si No

c) ¿Hay luminarias apagadas?

Si No

¿Cuántas?

d) ¿Qué porcentaje de luminarias se encuentran apagadas?

e) ¿Sabe a quién recurrir en caso de que las luminarias se encuentren rotas?

Si No

f) ¿Es capaz de identificar un rostro a 1.5 metros de distancia?

Si No

g) ¿La iluminación se encuentra obstruida por árboles o arbustos crecidos?

Si No

Check list for lighting conditions

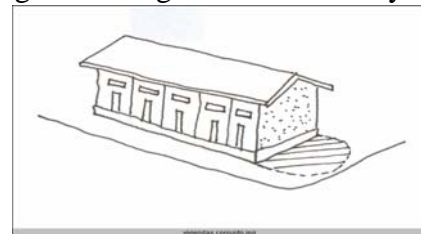
Development of the analysis

As stated before, the manual developed the analysis from the point of view of a person walking around the city, passing by different urban situations.

The starting point is the house of the walker, crossing the front garden and little by little getting into more complex situations.

The main areas are:

- Front garden
- Groups of houses
- Parking lots
- City block with row houses
- Free standing commercial facilities
- Large complexes of public buildings
- Empty areas, like plazas, and empty lots
- Overpass and underpass
- Urban equipment such as lighting, benches, trash cans are also considered as important elements in creating safe environments in urban public spaces.



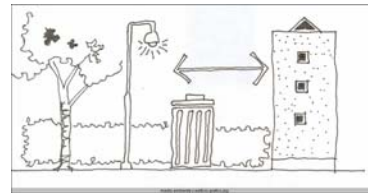
Side of a building without windows, potential place for opportunity crime

Analysis of different urban situations

The understanding of different urban situations is of great importance to set the right safety criteria in the public space as well as private space.

House and group of houses

The relationship between the house, the front garden and the public space is shown in the manual using illustrations stressing the importance of getting a clear view of the surrounding space. To see and to be seen is an important aspect when creating a safe environment. Some suggested actions are:



Environment conditions and the relationship with buildings

- Opening larger windows
- Clearing overgrown vegetation blocking the out side view from the inside of a house
- Solid non transparent Fences and gates avoid having a good visual communication between the inside of a house and the outside public space.
- Poor lighting

When observing groups of houses it is of great importance to observe the side views, back of buildings, corners, stairs wells, elevators, hall ways and walk ways. These are among the most important key places to be observed and analysed

Illustrations and pictures showing a good practice and a bad practice support the theoretical concepts, making it easier to understand the concepts and terminology alien for the non specialist.



Good practice.

Building with two entrances (two fronts), Windows and balcony allows a good visual relation between interior and exterior.

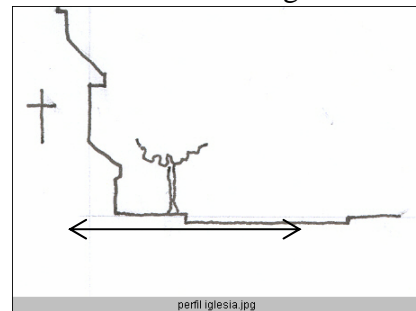
Some recommendations suggested to promote natural surveillance and perception of a safe environment in groups of houses include:

- Incentives to architectural design promoting natural surveillance in all faces of buildings, specially in the front of them
- Incentives to use buildings typology with “double front face”. This type of building doesn’t have the “back front”, where there is great potential to create unsafe environmental conditions

- Keeping clear front faces in buildings, specially in commercial ones
- Promote activities to naturally allow presence of people by the less transparent faces of the building (churches, schools etc) specially clear corners to promote natural surveillance over the public space.
- Improve lighting and enhance the visual range by clearing stairs wells, hall ways and similar spaces from potential obstructions.

When analyzing streets with continuing buildings, creating a solid border to the city block, the manual developed a methodology base on doing “cross sections”. By doing this it is possible to analyze the relationship between the inside of building and the public space.

This method allows the study of many different situations in front of public buildings such as a church, a commercial building, a housing complex. The study of each cross section shows a specific situation where potential problems can be detected as well as help in finding the proper solution.



Cross section over a church

The manual teaches the method by using illustrations and step by step directions.

Parking lots are one of the important urban spaces to study. The large empty space is often used for crime of opportunity. The system proposed in the manual shows the potential problems such as a lack of visual control over the parking area, little control over entrances, poor environment conditions, and lack of signs.

One of the proposed solution to improve the safety in parking lots, is the “Safer route” A safer route is a path connecting two important points equipped to aid the user in case of facing a dangerous situation. This route has good lighting, clear and specific directions about the area, call emergency point, among some of the important features.

When working with urban space and environment conditions, an important element to be considered is the urban equipment. Benches, trees, water fountains, kiosks, garbage containers, etc, are elements that help to support the potential presence of people in the public space, supporting in this way the natural surveillance of the area.

In large urban facilities such as malls, train stations, churches, hospitals, the manual make a strong emphasis in the relationship between inside of the building and the outside.

Finally, the manual takes into consideration a section of it to large empty spaces in the urban space organizing them in Squares (plaza), parks and empty lots. In the analysis of these urban spaces, there is a strong focus in the environmental conditions and visual range.



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Community Participation

The community participation is a key factor in the generation of a program to improve urban and environmental conditions. Taking this into consideration the manual *Espacios Urbanos Seguros*, proposed a methodology to organize the community and support the organization with a good management approach.

The community section considers the following main points:

Creation of the promoting team

This team is considered the “motor” for all community actions over the environment and urban space. Among the participating actors is, municipality personnel, the police force and community representatives.

Call

The call to a CPTED projects is done by the promoting team, in order to get the necessary community support. Open meetings to give information about the project and how it will develop are a good method to gather the community around a project.

Diagnosis

The main purpose of the diagnosis is to generate the necessary information that will allow to define the right safety problem(s), and to take the necessary decisions to start with the concrete actions over the problem.

The diagnosis stage also has different parts such as, gathering the information, Information about the safety problem, characteristics of the community, available resources of the community.

Decision making

The decision making process has three goals:

- Definition of goals
- Solutions proposals
- Decision making about solution options

Design and planning and solutions

At this stage the community along with the promoting team makes a detailed plan of action, considering the different activities and actions to be undertaking in order to solve the safety problems detected during the diagnosis stage

Doing the work

In this stage the project comes to reality, so the schedule of the works to be done and the necessary budget are important issues to be considered and controlled. Under this stage of the CPTED project is also important to consider:

- The possibility that the community takes all or part of the labor cost of the work
- The participation of the community is not reason for not hiring specialize labor



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- If the work is hired out to a contractor is recommended to consider the appointing of a representative in charge of relating to the community and receiving suggestions and complains.

Evaluation

The evaluation of the urban intervention can be done in three levels

- The process
- The results
- The impact

Experiences of Urban Intervention with the Participation of the Community

The final part of the manual shows three urban intervention experiences developed in different Chilean cities. The cities are Linares with 83.249 inhabitants, Valdivia with 140.559, and the comuna of Puente Alto with 492.915 in the Metropolitan Region of Chile.

Each experience shows the project done in the area, and explains it following the basic structure of the creation of the Promoting Team, Call, Diagnosis, Decision making, Design, Doing the work and Evaluation.

It is necessary to say that the methodology of the manual Espacios Urbanos Seguros, acknowledges the importance of the community participation as well as the space analysis. Working them in a separate way will not get the desire results. It is the community along with the promoting team, using the space and urban analysis the one that produces the changes in the urban space. Only, urban and space analysis plus the community participation will get the expected result or a better and safer urban spaces.

Conclusions

1. CPTED is a flexible program that can be adapted to improve the urban an environmental conditions in different cultures
2. The creation of a Manual to pass on the information to a participating community is a challenge that requires the work of multidisciplinary team of professionals
3. The manual must be created taking into consideration the local social and cultural conditions
4. It requires a good coordination among all participating organizations to produce a manual.
5. To have a successful CPTED program, the architectural and urban analysis and the community organization program must go hand in hand
6. The language of the manual must be simple, with illustrations and step by step directions to make it useful for the participating community



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7. The manual is only one of the many ways of passing to the community the CPTED methodology. New ways of passing the information can be explored by the CPTED practitioners

Bibliography

1. Arriagada Luco, Camilo y Sepúlveda Swatson, Daniela. Satisfacción residencial en la vivienda básica SERVIU, La perspectiva del Capital Social. Santiago, Chile: DITEC y MINVU, 2002. Monografías y ensayos. Publicación N° 315.
2. Arriagada Luco, Camilo y Sepúlveda Swatson, Daniela. Satisfacción residencial en la vivienda básica SERVIU, La perspectiva del Ciclo Familiar. Santiago, Chile: DITEC y MINVU, 2001. Monografías y ensayos. Publicación N° 316.
3. Kruger, Tinus; Karina Landman, and Susan Liebermann. Designing safer places: A manual for crime prevention through planning and design. Pretoria, South Africa: South Africa Police Service and the CSIR, 2001.
4. Ministerio Secretaría General de Gobierno. División de Organizaciones Sociales (D.O.S.). Manual de Seguridad Ciudadana para la prevención de la delincuencia. Santiago, Chile: División de Organizaciones Sociales (D.O.S.), 2000.
5. Ministerio de Vivienda y Urbanismo (MINVU). Espacio urbano, vivienda y seguridad ciudadana. Santiago, Chile: División Técnica de Estudio y Fomento Habitacional (DITEC), 1999. Monografías y ensayos. Publicación N°302.
6. Ministerio de Vivienda y Urbanismo (MINVU) – UNICEF. Niños, niñas y adolescentes en tres conjuntos de vivienda básica en Santiago, Chile: Sur Profesionales Consultores, 2003.
7. National Crime Prevention Council (NCPC). Designing safer communities: A crime prevention through environmental design handbook. Washington D.C., Estados Unidos: National Crime Prevention Council (NCPC), 1997.
8. Porcerusa Bundo, Joseph y Rubert de Ventos, María. La Ciudad no es una hoja en Blanco. Hechos del Urbanismo. Santiago, Chile: Pontificia Universidad Católica de Chile. Escuela de Arquitectura, 2000. Serie Arquitectura – Teoría y Obra – Volumen 3. Ediciones ARQ.
9. Rodríguez C., Pelagia, editor; Mosciatti O., Ezio, editor. Santiago, amable: Espacio público, arte y salud mental. Santiago, Chile: Antiqua Comunicaciones Ltda, 1999.
10. Sucher, David. City Comforts, How to build an Urban Village. Seattle, 1995.
11. Untermann, Richard y Small, Robert. Conjuntos de Vivienda. Ordenación Urbana y Planificación. México D.F.: Ediciones G. Gili, S.A., 1984.
12. Vanderschueren. Franz. "Prevención de la Criminalidad". Revista Temas Sociales, N° 32, Junio 2000.



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International CPTED Conference 13-16 September 2004*

13. Whitzman, Carolyn and Wekerle, Gerda. Toronto safer city guidelines. Toronto, Canadá: Healthy City Office, 1997.

Internet Addresses

1. United States Conference of Mayors (USCM): www.usmayors.org
2. Florida CPTED Network: www.flcpted.net
3. Secured by design: www.securedbydesign.com
4. Instituto australiano de criminología: www.aic.gov.au
5. Municipio de la ciudad de Micham, Australia: www.michamcouncil.sa.gov.au
6. Territorio Capital de Australia: www.act.gov.au
7. ICA (International CPTED Association): www.cpted.net
8. Desing out crime asociation (DOCA): www.doca.org.uk
9. E-DOCA: www.e-doca.net
10. Fundación Paz Ciudadana: www.pazciudadana.cl
11. Centro Internacional para la Prevención de la Criminalidad: www.crime-prevention-intl.org
12. Movimiento contra la Intolerancia: www.movimientocontralaintolerancia.com
13. Depto. de Urbanismo y ordenación del territorio U.P.M: www.habitat.aq.upm.es
14. Ministerio de Vivienda y Urbanismo: www.minvu.cl
15. Sur Profesionales: www.sitiosur.cl
16. Ministerio del Interior: www.interior.gov.cl