RE-THINKING CHILDREN'S EMPOWERMENT

An exploration of the Zapatista educational model to
promote resilience and empowerment through design

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AIM

Develop a manual to understand and bring
children's perspective to the practice of design

Practice and promote children's empowerment
through the design practice

Re-Thinking Children's Empowerment

An exploration of the Zapatista educational model to
promote resilience and empowerment through design

Abstract

This thesis is motivated by the hope of creating a better future for the new generations. Therefore, it aims to understand the children's perspectives and encourage their empowerment.

To accomplish this, it explores three approaches to understanding child development and a value case for providing a human perspective that could positively impact child development.

The first step is to understand what characteristics are required to address children's development and provide mechanisms to bring their perspective into design propositions that meet their needs. Therefore, this project combines psychological (Cognitive development), spatial (Cognitive experience), and pedagogical (Popular education) approaches to create a framework that understands their age necessities.

The second step is to incorporate a case study that has placed people and the environment at the center of its values. This move has the intention to discover concepts that could provide human values to design proposals. That is why this project has decided to implement the Zapatista edational model (from the southeast state of Chiapas, Mexico). It represents an essential component for understanding how community values can help to construct a caring, empowering, holistic, and sustainable environment where children can thrive and create stronger bonds within their communities.

The result is a matrix that combines the Zapatistas values and the three approaches to create a methodology to bring children's perspective into the collaborative design process. The work aims to turn the designers' position around children and actively involve them in how we shape and transform our society.

Key words

Education

Social changes

Empowerment

Critical awareness

Community

Acknowledgments

About the author

Leonardo Casanova is an architect with five years of professional experience in (industrial) architecture projects.

At the Chalmers University of Technology, the author found a space to question his ideas, reflect on the need to anticipate future challenges through his practice and acquire a deeper awareness of holistic sustainability.

The interest in working on a topic related to children came from a deep desire to move his actions into more social practice, aware that today is the time to act and create a better tomorrow.

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01

WHY THIS TOPIC?

There are several reasons why I decided to work on this topic, some of them are deeply personal, and others attach to what I think I can do as an architect.

Firstly, it is my internal frustration around the social problems that have been minimized, neglected, and even exacerbated for decades in my home country (México), with particular emphasis on the intensification of the breakdown of the social fabric after the nonsense declaration of war against "drugs" (Pérez, 2021).

How could I stay away from this situation? For decades, governments and society have taken advantage of children to use them as they please. Children have lost innocence and life opportunities due to crisis created by adults. *(Thiery et al.*, 2021; (Pérez, 2021).

Secondly, there is a global situation that will affect all human beings on the planet and will not make any consideration due to the socio-economic-political context *(Thiery et al.*, 2021). It will hit and it will be painful, and those in the most disadvantaged situation will suffer more.

We need to deconstruct our society to face the future, but we can not use old paradigms to create new paradigms. So then, I witness that we can not change or stop the climate (and social) crisis by acting with the same ideas that have created it.
That is why I firmly believe that we need to do everything on our hands to create the opportunities for children to develop the paradigms they will need to face future challenges.

Thirdly, since I started my professional life, I have had the feeling that architects should do less to respond to the interest of those who have money and more to build fair conditions for everyone.
Of course, architects are not saviors, nor are they responsible for solving all problems of our societies. Nevertheless, I strongly believe that we play an essential role in how our world is shaped and how that dictates the way social structures are perpetuated or broken.

For these reasons, I consider that children's empowerment is crucial in developing more resilient, fair and egalitarian societies, as stated by the 5th, 10th and 11th United Nations' Sustainable Development Goals (UN, 2022). So, What is more important than relinquishing the power that adults have monopolized for years and beginning to incorporate the thoughts and actions of children into the way we shape the world?

In my opinion, children's empowerment needs to become a priority as it involves those who will shape and live tomorrow's world. Moreover, it tackles social injustices and creates new ways of human interaction.

Through this work, I want to express my belief that positive transformations are achievable if we hear and act against the most profound and rooted problems. Of course, changes will not happen immediately, but there is a window to work with future generations and achieve a thriving future for everyone.

This thesis uses the research for design approach to INVESTIGATE what, how, and why is needed to address children's perspective.

It also uses an abstract-graphic approach (collages) to exemplify how designers can collaborate with children and understand their needs.
Knowing this, this work explores three approaches to understanding children's development, fostering their understanding, and bringing their perspective to design practice.

In the first place, this thesis presents the case study that supports the values that this thesis considers fundamental to creating a human perspective in the development of future practices of resilient design with children's perspective:

The Zapatista education is a model where the community is the core of the pedagogy. Therefore, it represents an alternative human approach to building new scenarios where communities can thrive and reduce/erase social inequalities.

Secondly, this work presents three approaches (Cognitive, Educational and Design) to understand children's development needs. These approaches were selected to place children at the center of the discussion and provide knowledge about the elements required to support their growth.

The outcome is a manual to provide strategies and guidelines for designers to see the world's through children's eyes and understand what they need and what concerns they face.
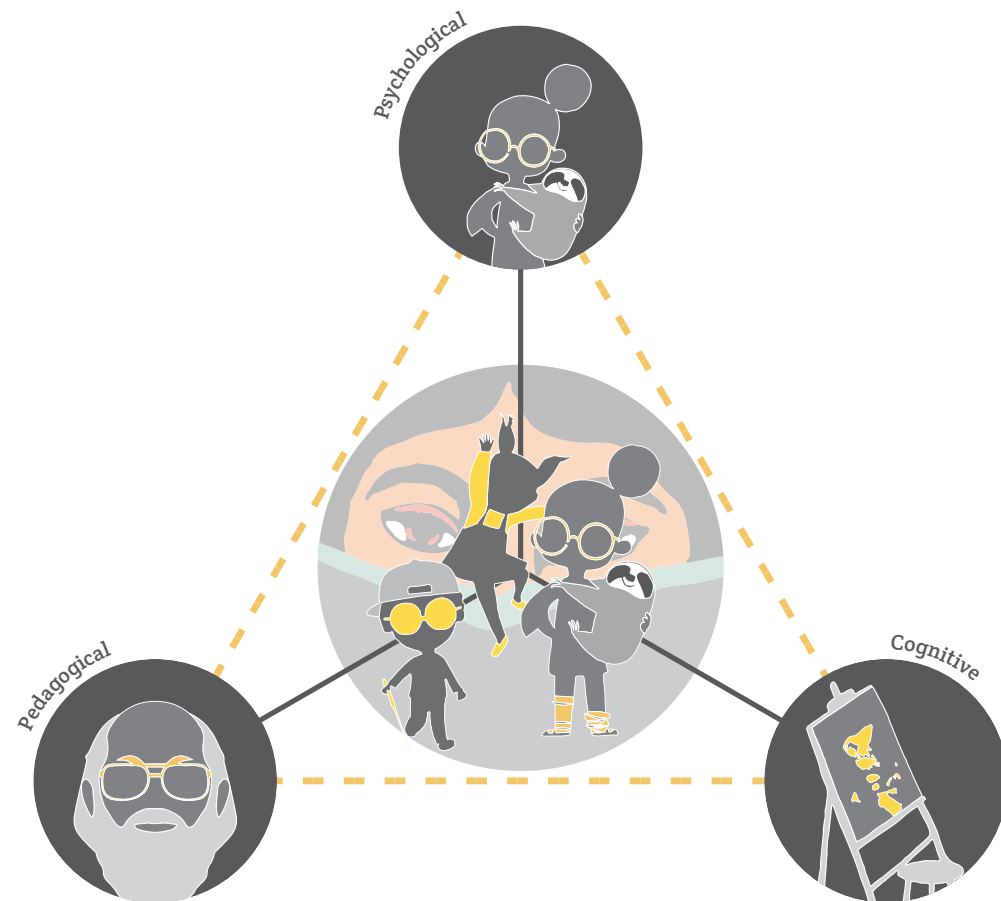
Structural changes require challenging and questioning the normative modes. However, these actions need to be ethically and socially responsible if we want to heal our societies.

This thesis is an exercise of questioning and actions around present social issues that can either create a bleaker or encouraging future. It is also an exercise in thinking about how designers can work beyond aesthetic or technical considerations.

By addressing the children's perspective, I am trying to understand how I can become more activist in my practice and reach a social group (children) commonly relegated to a second layer by adults.

Activism is about working with real problems and anticipating future challenges by acting outside of normative expectations. Bringing children into the discussion should be a critical factor in efforts to engage a more social approach in design practice.

In this way, this thesis decided to address the Zapatista context in Mexico. And despite the distance, I did the research with respect and deep humility around the subject.

Wth this work, I try to deconstruct my beliefs and understand where I am as an architect and what I can do to become an agent of cahnge.

I am aware that when we talk about children many problems become hyper-connected in different ways, but I also believe that small actions can motivate people to reflect, criticize, question and become aware that by working together many changes can be achieved.

Psychological

Pedagogical

Cognitive

THESIS GUIDELINE

THE PROBLEM . *(Manifesto + Future Challenges)*
Why is it revelant to talk about the present social inequities that the climate crisis will exacerbate?.

ALTERNATIVE FUTURE. *(02. The Zapatista Values)*
We need to question the traditional design practice and, in consequence, implement new strategies that integrate alternative, empowering and humanistic approaches. The study case presents alternative, empowering, and human characteristics needed to change what has created modern crisis.

UNDERSTANDING. (03. Approaches to understanding children)
Unfold the develpment conditions that will help to fill to understand children's mind and a way to understand their needs.

THE TOOLS. *(04.Learnings)*
Through the framework and study case, this thesis analyzes and extracts the main concepts that best reflect how designers could address children's empowerment, and attend to their psychological and contextual needs.

TAKING ACTION. *(05.Design the process of designing)*

The design strategies combines the study case values and the different approaches to create a manual that designers can use to collaborate with children.
This collaboration leads to an understanding of children's needs and challenges.

DEFINITIONS

The present definitions are an invitation to the reader to understand the author's perspective, intentions, and reflections in the process to write this thesis. These definitions were built based on my knowledge acquired through the research carried out for this work and seek to guide the reader through the document.

CHILDREN.
All present and future children who will pass the stage from 7 to 11 years.

CHILDREN'S EMPOWERMENT.
It refers to the active involvement of every child in the process of deciding and designing how they want to shape the world in which they will live and what conditions they wish to have.

EDUCATION.
The sum of actions (without the need for a specific physical space) that helps children develop their full mental and physical potential to question adult norms and become active members of their community and decision-makers that will affect their future.

EMPOWERMENT.
Empowerment is developing the physical and mental tools that will encourage children to reflect, question, analyze and become aware of their surrounding world, understand their role in that context, and consequently achieve a state of self-determination and autonomy.

FUTURE CHALLENGES.
The sum of social problems that will be exacerbated by global temperature increase to 1.5C or more and its consequent ecological crisis.

OPPRESSIVE FORCES.
Social, economic and environmental conditions that produce, perpetuate, and exacerbate social inequities and/or the lack of human rights.

In the next chapter (02. Research + Framework), this work explains the relevance of every approach. It also presents the central values that will help understand how designers could address children's empowerment by understanding their needs and what conditions can create better environments for them.

IT IS ABOUT / IT IS NOT ABOUT

IT IS ABOUT		IT IS NOT ABOUT
cognitive experiences	DESIGN	urban
alternative design		industrial
participation		materials
mutual knowledge		aesthetics
design strategies		
spatial agency		
popular education	EDUCATION	special needs
reflective		european models
critical		instrumental rationality
anticipation		banking model
		commercial
social	SUSTAINABILITY	technologies
future challenges		economy
resilience		energy
		"green" buildings
critical awareness	SOCIAL	culture
children's perspective		politics
changes		individuals
empowerment		
equity		
action		

Today we know that *FUTURE GENERATIONS WILL FACE A MORE CHALLENGING FUTURE* than previous generations due to Climate Change (Thiery et al., 2021). The *RESULTING DISASTERS WILL EXACERBATE SOCIAL INEQUALITIES*, and those in the most disadvantaged areas will suffer the most due to social limitations and oppressions.

Nevertheless, we do not know how challenging the future will be; *THE TRAINING AND EMPOWERMENT OF NEW GENERATIONS ARE FUNDAMENTAL* to preparing them for whatever comes.

EDUCATION is one of the best mechanism for this purpose and it is also a way to include the most relevant actor in the process of building a prosperous and resilient future: CHILDREN. Today's (and future) children are the hope for fairer and equitable societies. Their empowerment is fundamental to allowing this to happen.

This empowerment training requires adaptability and new (humanizing) perspectives. Thus, it is urgent to reflect on the design professions' position in this matter, and question and challenge the norm of traditional practice to respond accordingly to the challenge.

Fig#1 Graphic Manifesto

How can architects link HUMANAZING values and child development to bring children's perspectives to resilience and empowering design practices?

Why should architects start looking towards models like the Zapatista educative model to bring alternative ways to achieve children's empowerment?

SOCIAL INEQUALITIES

More Fires

Less Biodiversity

Less Water

More Droughts

Less Natural Resources

Less Food

More Floods

The climate crisis is changing life on Earth. Today we are aware of the environmental consequences of climate change: more fires, less drinking water, fewer natural resources, more floods, more droughts, less food and less biodiversity.

What we do not know, but are sure will happen, is the scale and impact of worsening social inequalities due to these changes (Thiery et al., 2021).

Fig#2 Climate crisis and its social consequences diagram

FRAMEWORK OF CURRENT SITUATION

Bleak Future

Child

Adults

Social Inequities

Climate Crisis

Instrumental Rationality

Bank Education

Impact on Children
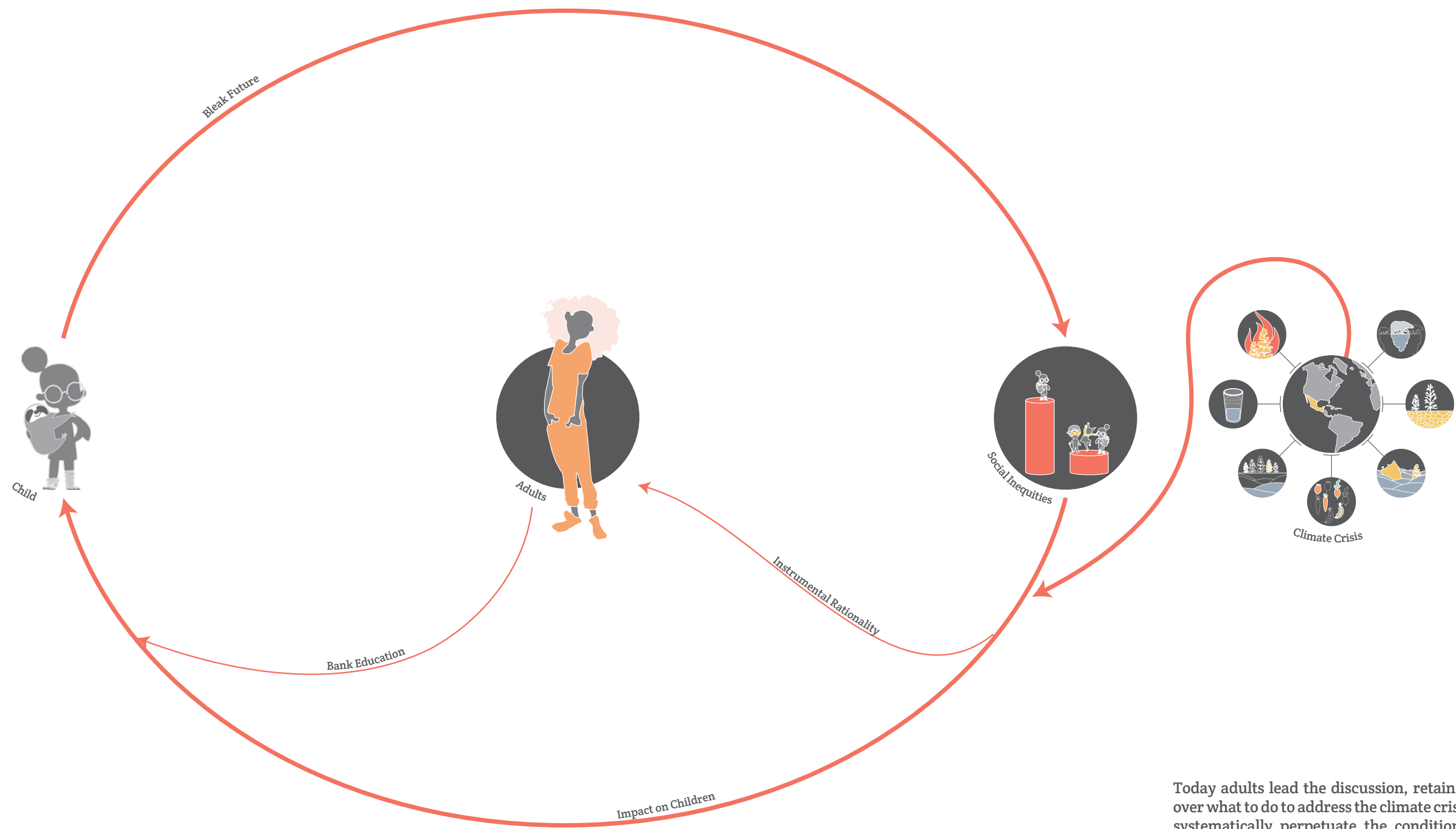
Today adults lead the discussion, retain power over what to do to address the climate crisis, and systematically perpetuate the conditions that have created the current crisis and will lead us into a more inequitable future.

In the following two chapters, this work presents the values that could create better conditions of life and the approaches that would help address those values within children's empowerment.

02

THE ZAPATISTA VALUES

I decided to study a Mexican scenario because I am Mexican and have a solid motivation to understand how my professional action can contribute to fighting and reducing my country's social injustices. In order to understand the Zapatistas and its values, I provide a brief historical context of the Mexican indigenous situation and how they look in modern Mexico.

500 years of resistance

All modern nation-states in America are products of five centuries of genocide, racism, slavery, neglect, and the denial of their capacity for self-determination and autonomy, first by European colonizers and after by modern "democratic" states.

This time has also witnessed the indigenous resistance to this domination process and, more recently, the appraisal and visualization of indigenous people and their culture. In Mexico, the Zapatistas have been part of this resistance movement.

Being Indigenous in Mexico

Mexico has 126 014 024 inhabitants (2020). Of this figure, 7 364 645 (over three years old) speak an indigenous language (78% live below the poverty line), and 4 600 00 of them are children (ages 0 to 17 years old) (CONEVAL, 2020).

Of the total indigenous population, 60% of the them live in 5 states: Chiapas (1 387 295), Oaxaca (1 193 229), Veracruz (650 507), Puebla (604 471) y Yucatán (520 580)(CONEVAL, 2020).

Chiapas

It is imporant to understand the situation in Chiapas as is the home of the Zapatistas and represents a cornerstone in the redefinition of the anti-colonial movement in Mexico.

Chiapas has a population of 5 500 000 inhabitants and 75.5% of them live below the poverty line.
2 297 000 of them are children (ages 0-19 years old) (CONEVAL, 2020). Geographically, it is a biosphere area with extensive mountainous, forest, and plains regions. It has an essential waterfront with the pacific Ocean, shares a border with Guatemala, and is a neighborhood of the Mexican states of Guerrero, Veracruz, and Tabasco.

Before the Spanish conquest (1519), it was part of the Mayan empire. The territory was mainly used for agricultural purposes during the Spanish domination, and its indigenous inhabitants remained within the lowest social strata. The Revolutionary war (1910 – 1917) represented an opportunity to free themselves from the yoke of landowners. Nevertheless, in spite of that, the end of the war did not meet the long-standing demands for development and social welfare.

The recent history (second half of the 20th century) was also unfavorable to this state. Industries were established in the states close to the US, and government structure was developed in the country's center. Therefore, economic and industrialization development didn't reach Chiapas.

But, Who are the Zapatistas?

Zapatistas live in the northern area of Chiapas and took their name from Emiliano Zapata, a leader of the Mexican Revolution, whose philosophy "La tierra es de quien la trabaja" (The land belongs to those who work it) sought to restore the possession of the land to the peasant classes in Mexico.

The Zapatistas integrated the Zapatismo movement, a political-military organization formed mainly by indigenous people of the Tzeltal, Tzotzil, Chol, Tojolabal, and Mam groups of Chiapas. Zapatistas existence was publicly known on the first of January 1994 after the rise of their Ejercito Nacional de Liberación Zapatista (ENLZ) and the 12 days battle to achieve autonomy from the federal government. Since then, they have worked to make their fight visible and spread their ideology: improve their living conditions throughout the emancipation of the State and capital.

Relevance

Nowadays, their communities are autonomous from the central federal government, meaning that they can implement their model to seed their peace, respect, and community values within the new generations. Therefore, these values have been considered relevant for the present work since they represent an alternative, holistic and human model to create better-living conditions.

Children Population **20 700 000**

Children Population in Poverty **32 000 000**

Population **126 014 024**

Indigenous Population **7 364 645**

Indigenous Children Population **4 600 000**

Mexico

Chiapas

83%
Children Population in Poverty **1 650 000**

±2 000 000
36%
Children Population

Population **5 500 000**

Indigenous Population **±1 400 000**
25%

Fig#6 Socio-economic-ethical context diagram (CONEVAL, 2019; INEGI 2022).

ZAPATISTAS

Figure 02.01 Credit: De Agostini Picture Library/Universal Images Group

03.02. Credit: Wesley Bocxe

03.03. Credit: De Agostini Picture Library

03.04. Credit: Gerardo Magallon

ESCUELA PRIMARIA REBELDE AUTONOMA ZAPATISTA

La Educación Autónoma Construye Mundos Diferentes Donde Quepan Muchos Mundos Verdaderos Con Verdades
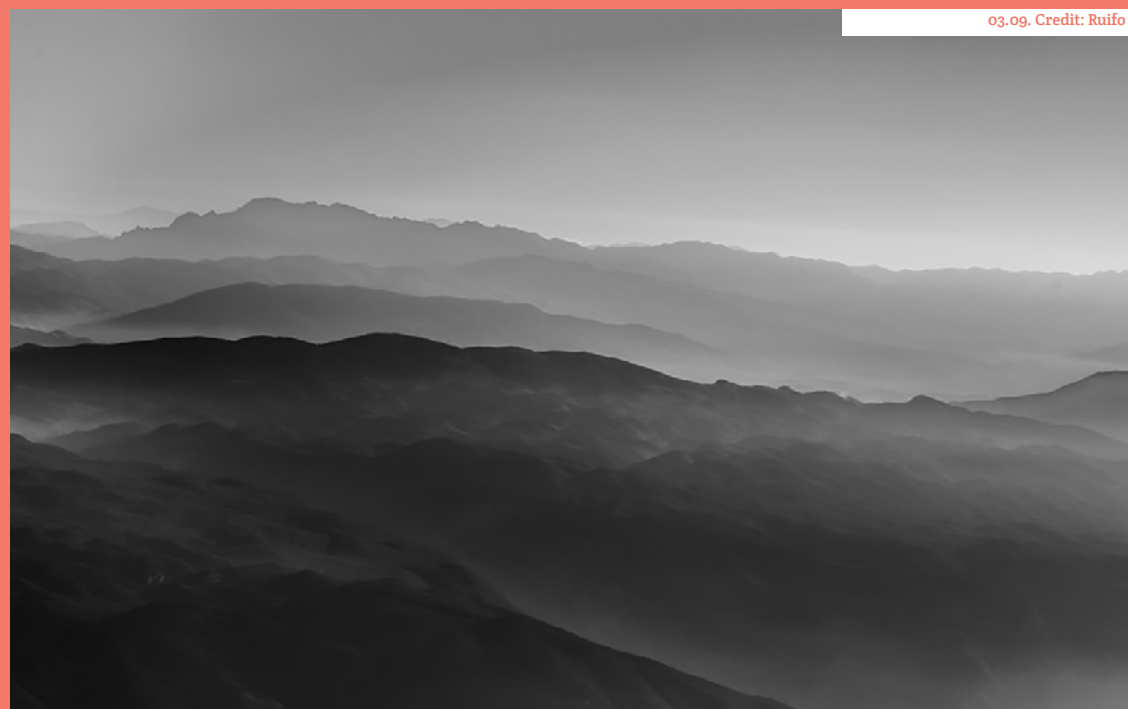
03.05. Credit: Wikimedia Commons

03.06. Credit: Universal Image Group

03.07. Credit: Universal Image Group

03.08. Credit: De Agostini Picture Library

03.09. Credit: Ruifo

03.10. Credit: Wesley Bocxe

EDUCATING FOR THE COMMUNITY

Fig#7 Zapatista school concepts diagram.

As mentioned before, this thesis considers education as a keystone to addressing social changes needed to create better conditions of life. For that reason, it considers relevant to present the historical context where Mexico worked to attend to people's needs and build communities with human values.

SOCIAL HISTORICAL STAGE OF MEXICAN EDUCATION

In 1917 education was decreed official, secular and free. Three years later, the program "Misiones Culturales" (Cultural missions) was created to teach children and adults in rural communities to read, write, arts, crafts, and agriculture. In 1921 SEP (Secretary of Public Education) was created.

In 1930, Mexico had 6 800 rural schools, and by the end of the decade, it had moved into a socialist educative model. During the 1940s, "Escuela de Amor" (School of Love) was established to promote education based on unity, family, values and morals (Guerrero, 2018).

The flow changed during the 1980s with the introduction of neoliberalism politics. The federal government changed the social focus for one that favored private institutions whose vision was aligned with the new economic perspectives.

THE ZAPATISTA SCHOOL

It is a model close to Popular Education that has been implemented in Mexico within the Zapatistas' communities.

Both Zapatista school and Popular Education are models that had emerged when social movements were happening; therefore, they effectively question and challenge the systems and encourage social transformations by understanding the reality and need of the people. They promote a critical, reflective, and autonomous educational model.

In order to better understand the Zapatista school characteristics, we need to put aside the traditional idea that education must serve material and social development. Achieving graduate students who will participate in the conventional work field environment is not essential since there is no proof that education is equal to economic and human progress (Silva, 2019).

THE ZAPATISTA SCHOOL CHARACTERISTICS

COMMUNITY.
It is the most important pedagogy's component to reject any individualistic idea. Thus, it does not seek to educate to generate an entrepreneurship mentality or praise meritocracy (Silva, 2019).

PEACE.
A primary value is to achieve peace within its communities and abroad borders.
It is based on the dignity and respect of every community member and nature (Silva, 2019).

EMPOWER THE COMMUNITY.
It trains new generations to develop a holistic posture where environmental and human needs are bonded. Thus, it is against the ideas that people should do whatever it takes to achieve their goals or maximize accomplishments by the most efficient or cheapest approach (Silva, 2019).

SERVE THE COMMUNITY.
It is essential to support and return to the community what has been given. Therefore, it refuse any action to behave as an instrument of the expectations of capitalist society (instrumental rationality) (Silva, 2019).

ANTICOLONIALISM.
It teaches students to break the practice of using education to perpetuate the interest of the Mexican State. Instead, it favors an innovative and transformative model that provides autonomy and emancipation to the community (Silva, 2019).

NON-COMMERCIAL.
Students do not pay for their education, and teachers do not receive a salary; instead, the community supports them by providing food, shelter, and essential services (Silva, 2019).

RELEVANCE

The Zapatista School model defines the values that will guide this work to prose design strategies that address thriving human perspectives and community building instead of individualization and economic ideals.

03

3 APPROACHES TO UNDERSTAND CHILDREN

PSYCHOLOGICAL APPROACH

Fig#2 Concrete operational Stage concepts diagram base on Koblin (2020).

"COGNITIONS CONSTITUTE THE CORE OF ANY EXPERIENCE."

Williams (2017)

Jean Piaget's cognitive development theory

Jean William Fritz Piaget (1896-1980) was a Swiss psychologist pioneer working on child psychological development. His life's work became the theory of cognitive development.

Jean Piaget's Stages theory of cognitive development has 4 different development stages, according to the children's age: Sensori-Motor Stage, Pre-Operational, Concrete Operational and Formal Operational Stage. Every child needs to pass through all of them before reaching the whole human intellect (Koblin, 2020).

Piaget's noted that when we are children, we lack life knowledge, which is why children's perception of the world and the input process differs from adults and varies according to age (Koblin, 2020).

Concrete operational stage

Understanding the development process of the human mind is essential for the present master's thesis, as the human cognitive faculty is responsible for perceiving, interpreting, and telling us everything about our physical surroundings.

This thesis focuses on the Concrete Operational Stage (COS) (age 7 to 11) since it is the moment when children start vdeveloping logic about concrete events and, therefore, understanding how the physical world works (Lewis, 2020). The awareness of the physical realm is fundamental for this project, as it aims to provide a space where the physical (material and immaterial) characteristics foster awareness and empowerment.

Piaget defined five characteristics of how children's minds work in this stage and become fundamental to address a real understanding of children's development.

The following section will address the characteristics that every child develops from the age of 7 to 11 years old. The order does not represent how children develop these skills nor does it relate to specific ages (Koblin, 2020).

Concrete Operational Stage characteristics

CONSERVATION.
At this stage, children can understand that some elements can be reshaped without changing their composition. So, for example, the same amount of water in two containers of different shapes remains the same (Koblin, 2020).

DECENTRATION.
Children are capable of concentrating on several elements at the same time (Koblin, 2020).

CLASSIFICATION.
At this stage, the ability to organise elements in independent groups (e.g. plants and animals) and create sub-categories within those groups (e.g. animals that swim and animals that walk) is growing (Koblin, 2020).

SERIATION.
Children can classify objects in a specific order depending on their physical characteristics. For example, bears from the biggest to the smallest (Koblin, 2020).

REVERSIBILITY.
Children become aware that they can reverse some actions by doing the opposite (Koblin, 2020).

SOCIOCENTRIC.
It is the first step to understanding how other people view and experience the world and using it to make decisions and solve problems (Koblin, 2020).

Relevance

Understanding the process of development of the human mind is essential for this master's thesis, since the human cognitive faculty is responsible for perceiving and interpreting the physical environment.

For this reason, the use of Jean Piaget's theory is essential to implement strategies that are in tune with the mental development of children and, therefore, achieve their perspective.

Mexico has specific social conditions attached to its history, culture, economy, and society. Therefore, in this thesis, I will use the Popular Educative philosophy as a basis, as the model relates to the reality of the Mexican context.

Paulo Freire's Context

Paulo Freire (1921-1997) was a Brazilian pedagogue and philosopher pioneer in the critical pedagogy movement. Different Latin American social movements (like the Cuban revolution) influenced his work in the 1960s.

The result of that influence was the Popular Education model, a liberating political-pedagogical philosophy that boosts personal growth and autonomy.

Unfortunately, during the 1980s, neoliberal reforms were introduced in Latin America, exacerbating old problems and creating fractures in educational (and social) structures all around. Therefore, the modern popular education approach seeks to understand the knowledge and skills necessary to face these problems and the new situations emerging (Jara, 2010) on different scales like the Climate crisis.

Popular Education Model

Popular Education is an active model that uses political and social aspects to encourage people to take action to overcome their oppressive conditions and become agents of change. It seeks "to build egalitarian and fair relationships that respect diversity and equal rights" (Jara, 2010, p.290) in communities, regions, and countries through social changes that will erase discrimination, patriarchy, misogyny, inequalities, and exclusion with an ethical and emancipatory view.

Popular education shows up as a democratic, critical and liberating model that drives changes by empowering people (and children) through social awareness and the influence on economic, political, social and cultural relationships.

Due to its open, dynamic, progressive and popular nature, it is also a model in constant transformation.

Popular education Characteristics

CONTEXT.
Participants' life experiences are crucial, making their physical, social, economic, mental and environmental situation essential to the educative process (Jara, 2010).

EQUITY.
It is a horizontal model that focuses on a people-oriented and people-guided, meaning that everyone is a teacher and a learner. There are no hierarchies (Jara, 2010).

DIALOGUE & REFLECTION.
Primary tools to share, hear and understand people's experiences. Through dialogue and reflection, participants become aware of their context beyond the tangible reality (Jara, 2010).

CRITICAL CONSCIOUSNESS.
It aims to provoke an awakening from the oppressive forces and foster critical consciousness and new perspectives of the world (Jara, 2010).

EMPOWERMENT.
It looks to encourage people to think for themselves and take collective actions against oppressive factors in a struggle for human dignity and liberation (Jara, 2010).

The six characteristics should be understood as a single entity that provides the pedagogical tools to break traditional models and inspire students to shape their own futures.

Relevance

The empowerment of children requires that they become agents of transformation. However, this will be achieved until they become aware of their reality and decide to break with the conditions of oppression.

Due to the characteristics mentioned above, Popular Education is an approach that will lead to the generation of strategies to achieve this breaking point.

Equity

Reflection

Empowerment

Dialogue

Popular Education

Context

Critical Consciousness
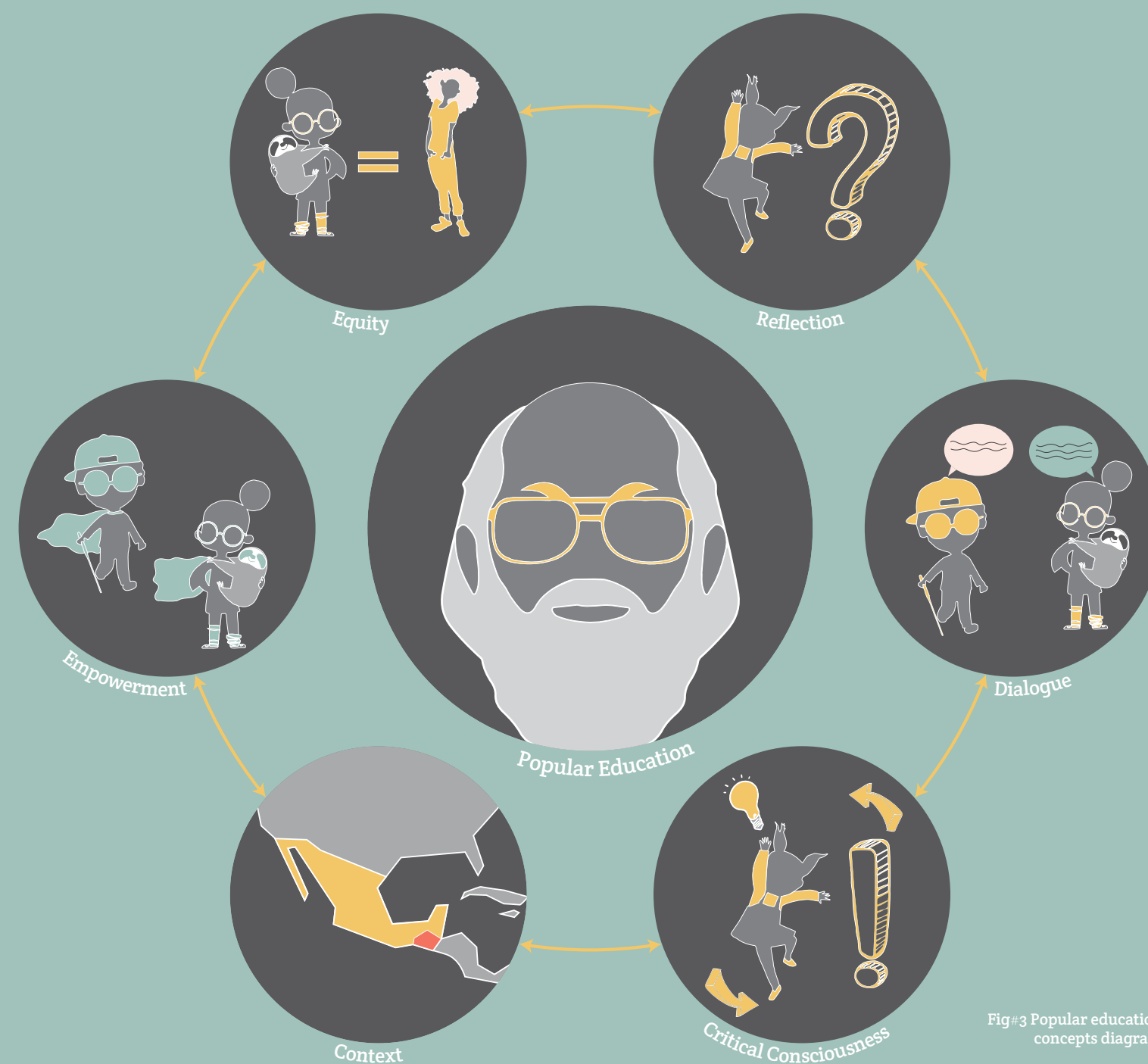
Fig#3 Popular education concepts diagram

"UNA DE LAS TAREAS DEL EDUCADOR O EDUCADORA...ES DESCUBRIR LAS POSIBILIDADES...PARA LA ESPERANZA"

(ONE OF THE TASKS OF THE EDUCATOR...IS TO DISCOVER THE POSSIBILITIES...FOR HOPE)
FREIRE (2014)

COGNITIVE APPROACH
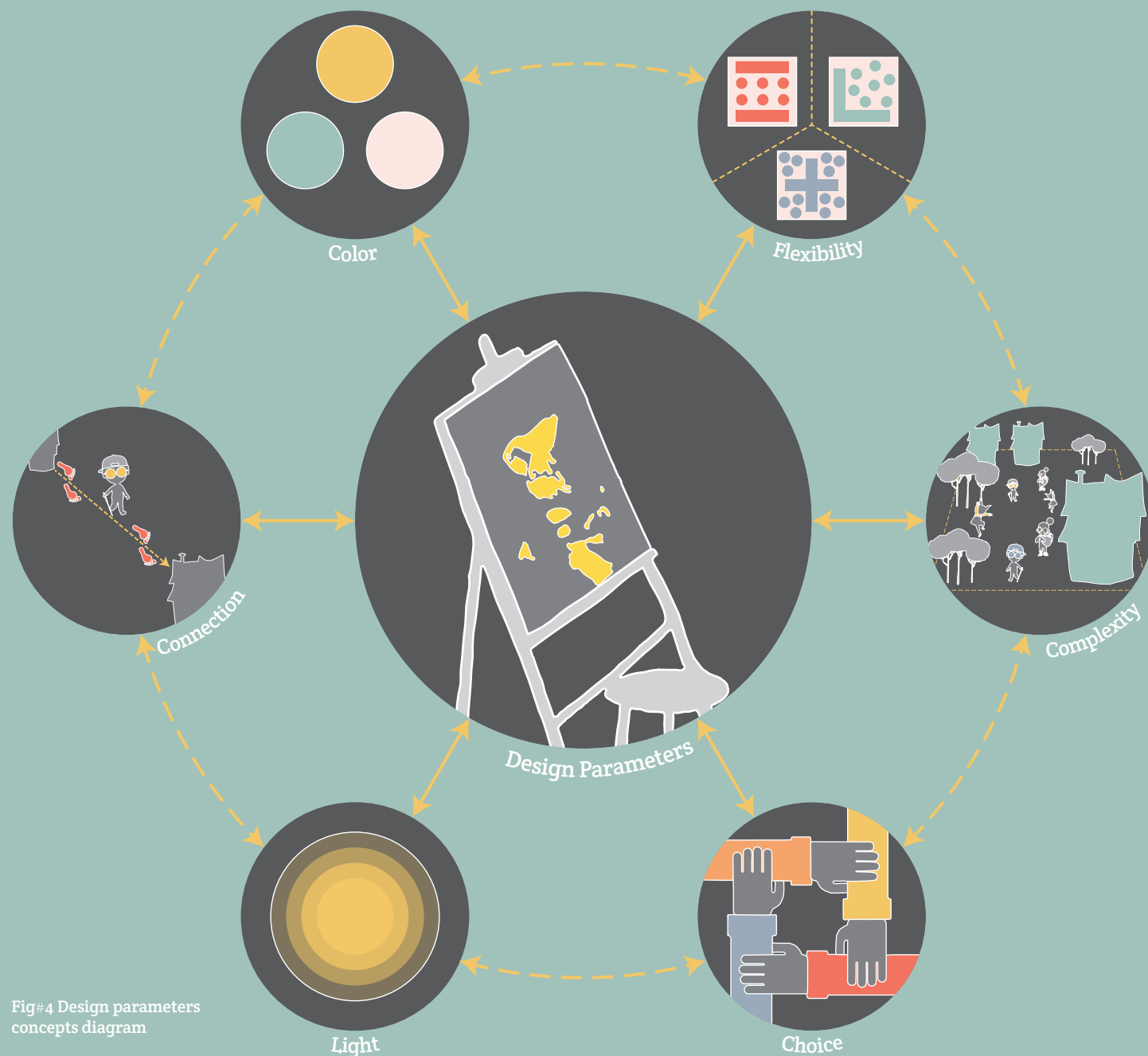
Fig#4 Design parameters concepts diagram

Color
Flexibility
Complexity
Connection
Design Parameters
Light
Choice

"THE DESIGN OF THE BUILT ENVIRONMENT IS IMPORTANT FOR HOW WE ACT IN THE PRESENT. IT IS IMPORTANT FOR HOW WE WILL CONDUCT OURSELVES IN THE FUTURE"

Williams (2017)

Understanding the relationship between the physical environment and children's perspective is necessary to address a holistic approach.
Therefore, I introduce this third approach to understand what physical conditions could favor children's empowerment.

The Relevance of Cognitive Awareness

Cognitions constitute the core of any human experience (Williams, 2017). Our body is a powerful way to interact and experience the physical realm. Our mind the responsible for reading, analyzing and translating the experiences into information we can understand.

In order to adress those mental layers, it is necessary to become aware, foster knowledge, and act in reasons of how the people will perceive, live in, and understand the design environment. Today, we know that the cognitive experience can inhibit or advance pedagogical objectives in educative environments. Therefore, educative spaces need to be adequate to the psychological needs of every participant.

Today, we know three ways to explore the relationship between cognitive perception and the built environment experience:

- Our body profoundly influences how our minds think.
- Our physical context shapes how our bodies perceive the environment, making the conscious awareness fundamental in the internal cognitive perception.
- Humans are strong, environmentally embedded beings. The worlds we build construct the literal, actual frame we use to cognitively construct ourselves as human beings and our relationships with one another.

And because the built environment is integrated into our self-identity and conceptions of others, it plays an active role in how we construct our past, present and also in how we, individually and in community, move forward in the world (Williams, 2017).

A University of Salford research found that six built environment design parameters showed a high impact on pupils' learning progression (Barret et al., 2012).

The 6 Design Parameters

COLOR
Careful consideration of color for the physical environment (classroom and furniture) fosters the learning and teaching mood (Barret et al., 2012).

CHOICE.
How the different characteristics allow students to develop a sense of ownership. And how elements (furniture, fixture and equipment) support the learning and teaching (Barret et al., 2012).

COMPLEXITY.
Depending on the building/site area and novelty, the space can provide alternative learning spaces (Barret et al., 2012).

FLEXIBILITY.
The space allows for various learning methods and activities, and students interact without crowding (Barret et al., 2012).

LIGHT.
The quality and quantity of natural light in the classroom and the degree to which its level can be controlled manually (Barret et al., 2012).

CONNECTIVITY.
The importance of having wide, clear and well-oriented pathways (Barret et al., 2012).

Relevance

These parameters are a guide to inspire the generation of strategies that address children's perspectives from the elements of the built environment that can create better physical and cognitive conditions for each child.

There is no intention to use them literally in the process to re-think the design process to empower children.

FRAMEWORK FOR CHILDREN'S EMPOWERMENT

Bring's Children Perspective to Face the Future

Egalitarian future

Psychological

Zapatista Values

Children's Perspective

Cognitive

Social Inequities

Climate Crisis

Bank Education

Instrumental Rationality

Pedagogical

Impact on Children
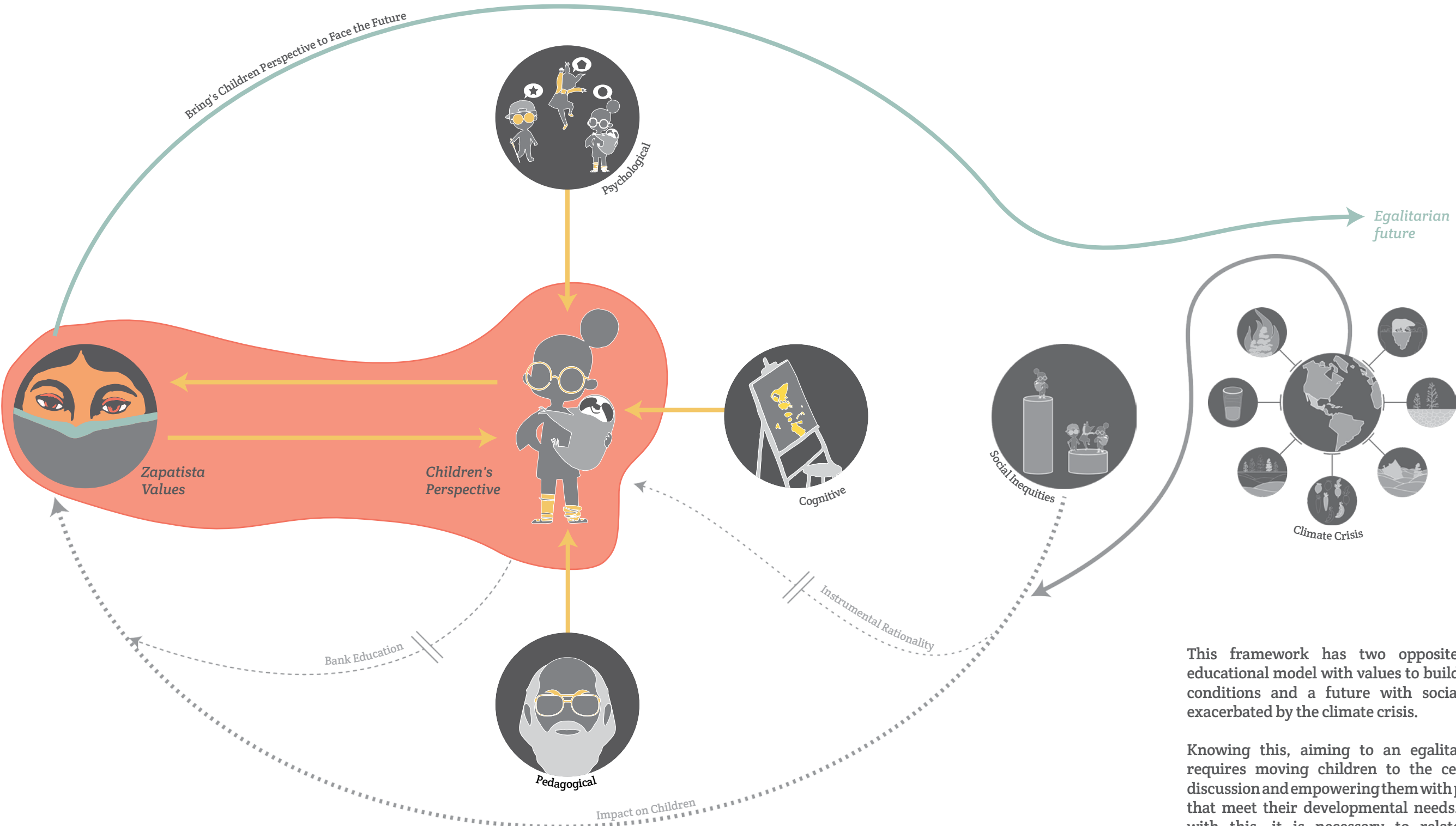
This framework has two opposite sides: an educational model with values to build egalitarian conditions and a future with social inequities exacerbated by the climate crisis.

Knowing this, aiming to an egalitarian future requires moving children to the center of the discussion and empowering them with perspectives that meet their developmental needs. Once done with this, it is necessary to relate children's development to a model that can provide values that humanize their needs and problems.

By doing this, adults allow children to break with the models that have created crisis conditions and thus build new paradigms that will lead to a prosperous future.

Fig#5 Framework concepts diagram

04

LEARNINGS

The learnings reflect the author's understanding of the approaches and the study case and what elements are relevant for the design process. The intention is to recapitulate previously learned elements and move from the general to the particular in the design process.

Psychological

- The children's cognitive faculty is learning how to interpret the physical environment and the different elements that compose it.
- Children develop the logic about concrete events, relating their actions to changes in the physical world, and their thoughts are different from their peers.
- The six aspects that children unlock during this period of life show that they can become active members in the design process and be capable of making conscious decisions about what they want and need.

Pedagogical

- Proposals that aims to develop critical awareness does not explain to people that they live under oppressive conditions; it creates the conditions to talk, reflect and become aware of those conditions.
- The pedagogy should address identifying and working on what knowledge and skills are necessary to meet present and future needs.
- Educative perspective must encourage children to become active members of their community and boost adults to give up control over decisions that affect the community and children's development.

Cognitive

- The physical space greatly influences how our brains construct our individual and community identities. Therefore, strategies must understand the physical characteristics that positively impact children's minds.
- Specific design characteristics advance and support personal and educative growth. Their implementation should meet children's physical and psychological needs.
- The built environment plays a crucial role in how we can move towards a resilient future. Hence, understanding the present physical characteristics associated with the perception of community and identity is essential to project ideas that respond to future challenges.

The Zapatista School is a model that looks after its **COMMUNITY**, and its pedagogical model is built around it. The community is there to support every member of it, and in consequence, every member is there to help and take part in the community's life.

Therefore, strategies must understand how community sense is built and children's role in it. Moreover, they should extract the key elements that create the concept of community.

EMPOWERMENT is a concept linked both to the community's feasibility and respect for the environment. Consequently, it is desirable to understand an approach where community and environment are bonded to fight against the destruction of the environment and its consequent crisis.

Thus, the strategies must look to understand Zapatistas' relationship with the environment, what role the environment plays in their ideology, and how they teach to respect and live in harmony with it.

Building **PEACE** could have different meanings and approaches, but unquestionably it is a concept that everyone should aim to build. Peace could be a synonym for egalitarian societies where poverty, crime, and lack of human rights are things of the past. Therefore, strategies firstly need to get what peace (present and future) represents for Zapatistas, how they work to make it happen, and what other factors play in this equation.

Free and quality education must be prioritized to achieve the long-awaited change. Bringing a non-commercial educative model to the discussion is an excellent starting point to build that bridge. Thus, strategies should explore how Zapatista's **NON-COMMERCIAL** model works and how it could be replicated in other contexts.

ANTICOLONIALISM education is a method to deconstruct societies around harmful ideas. In this way, the teaching and learning process should develop the conditions to ensure children's critical awareness of how to build a prosperous future under their own ideas, identity and context.

The strategies should explore how Zapatistas live within their traditions and how they receive, question, understand (and implement) ideas from the outside. Furthermore, strategies should aim to create scenarios where anti-colonial perspectives can be implemented in contexts where beliefs of globalization are well-rooted.

05

DESIGN THE PROCESS
OF DESIGNING

BRING CHILDREN'S PERSPECTIVE

I had a conversation with Ida Liffner (MA in Child Culture Design at HDK, Gothenburg University), an expert in collaborative workshops with children, who made me notice that children's empowerment is directly related to adults' involvement level.

In this sense, the strategies seek to build a bridge between children's needs, dreams, expectations and thoughts and adults' awarness of the fact that they need to give up power and allow children to be an active member of society.

The following matrix is the author's interpretation of how the research can be integrated to define the essential elements needed to create the design strategies to understand children's perspective.
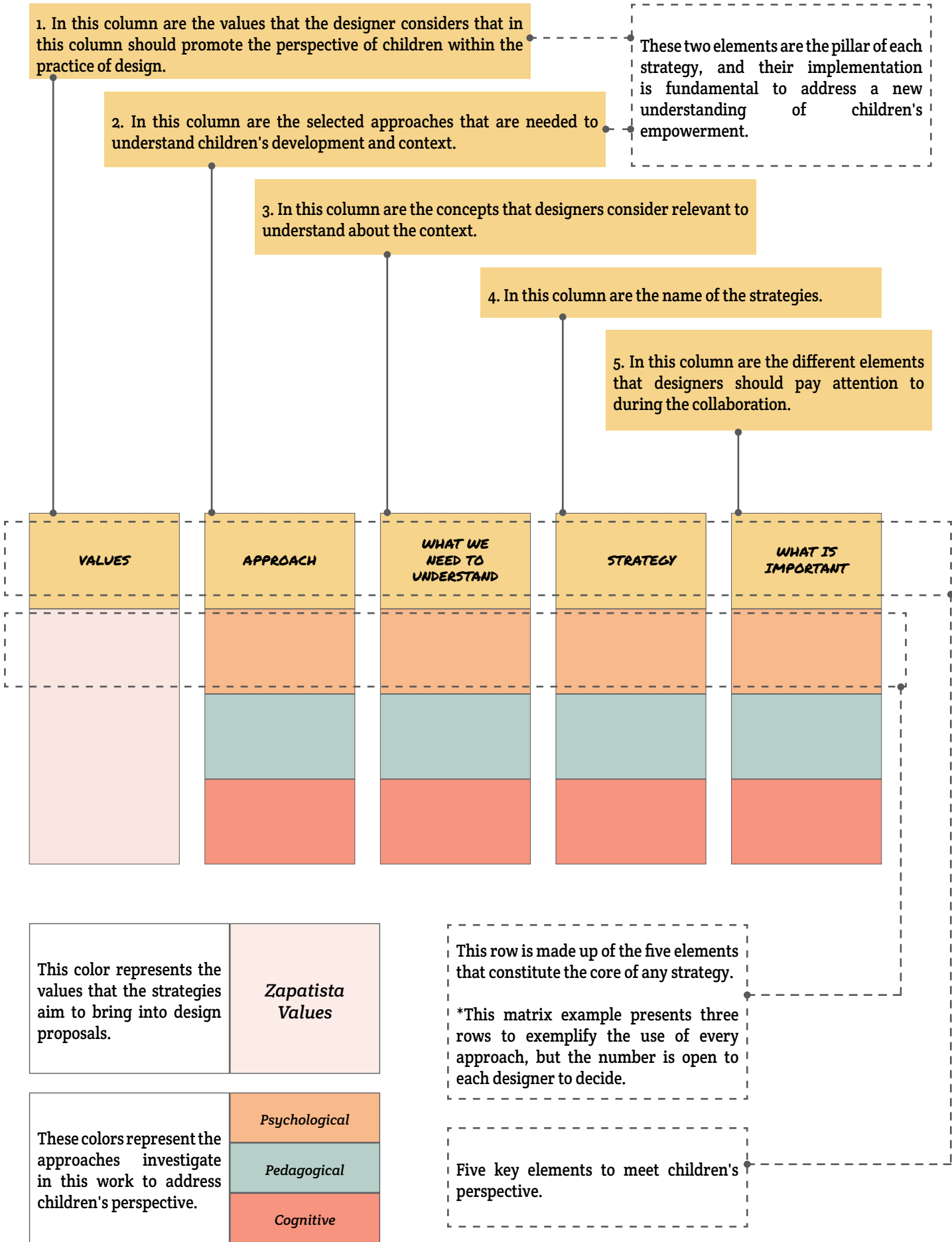
A MATRIX TO DESIGN STRATEGIES

With this in mind, it is time to link the Zapatista values with the three approaches and create a manual to guide designers to develop new ways to understand children's vision of the world.

This matrix integrates the values and characteristics detected that positively influence the development of children. Its conformation is expanded to link what needs to be understood within the approach to foster empowerment and personal growth and what is essential to attend during the workshops in relation to the values.

However, this matrix is an open tool, flexible to be adapted according to different values, approaches, and the context in which designers work. The five key elements represent what the author have found relevant to bring children's perspective into design practices.

MATRIX COMPOSITION

1. In this column are the values that the designer considers that in this column should promote the perspective of children within the practice of design.

These two elements are the pillar of each strategy, and their implementation is fundamental to address a new understanding of children's empowerment.

2. In this column are the selected approaches that are needed to understand children's development and context.

3. In this column are the concepts that designers consider relevant to understand about the context.

4. In this column are the name of the strategies.

5. In this column are the different elements that designers should pay attention to during the collaboration.

VALUES	APPROACH	WHAT WE NEED TO UNDERSTAND	STRATEGY	WHAT IS IMPORTANT

This color represents the values that the strategies aim to bring into design proposals. — *Zapatista Values*

These colors represent the approaches investigate in this work to address children's perspective. — *Psychological* / *Pedagogical* / *Cognitive*

This row is made up of the five elements that constitute the core of any strategy.

*This matrix example presents three rows to exemplify the use of every approach, but the number is open to each designer to decide.

Five key elements to meet children's perspective.

BUILDING A STRATEGY

THE INTENTION OF THE STRATEGIES

The following strategies provide guidelines for collaborative workshops with children. Their intention is to collect objective and tangible information to support proposals that meet children's perspective.

Furthermore, it is a solid intention to create a new perspective focused on the empowerment of children through a deep understanding of their needs, reality, and factors that address respect, care, and coexistence among peers and the environment.

Therefore, this perspective must be built with values that place humans and the environment at the core of the discussions and bring approaches that understand children's minds and context. Having this in mind, architects can involve children in the process of building a thriving future that meets their needs and dreams.

The strategies presented in this work exemplify by combining the Zapatista values and the development approaches designers can bring ideas that promote resilience and empowerment.

INSPIRATION

The present strategies were inspired on StudioGoja (http://studiogoja.se/) work. His workshops with children demonstrate the relevance of allowing children to participate in the process of imagining, building, and transforming the places they inhabit through dynamics that enable children to express their feelings through mapping and understanding communities.
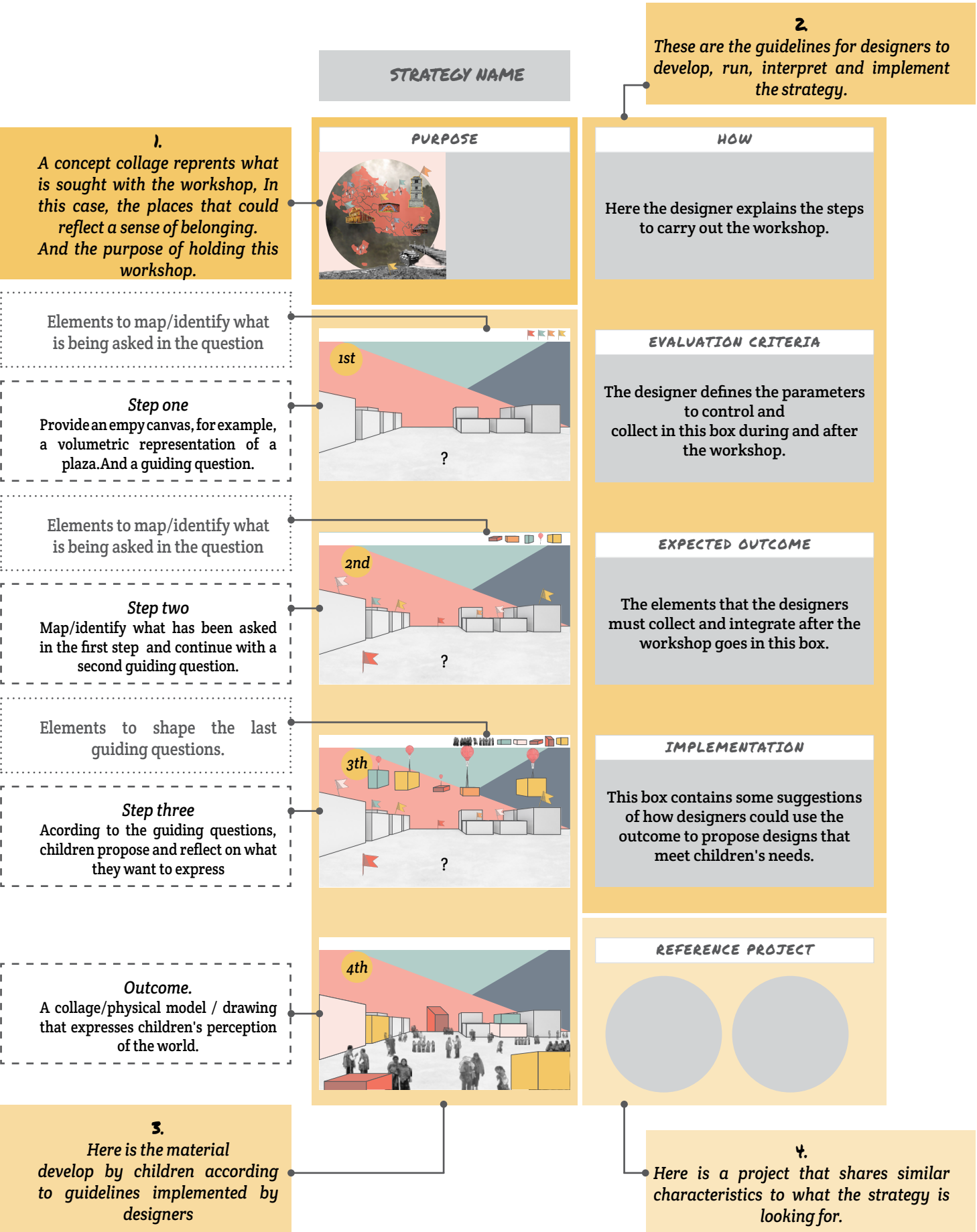
INTRODUCTION TO THE STRATEGY

Knowing that the first step to creating a strategy is done by integrating the five elements of the matrix, the next step is to define the parameters to use this strategy in the field.

Each strategy presented in this manual aims to show the four elements necessary to build any workshop based on the parameters of the matrix:

1. A concept collage with a description of the purpose of carrying out this Strategy. The intention is to show the reader/designer the relevance of aiming at specific objects with the Strategy to fulfill children's needs..

2. Four guidelines to develop, define, interpret, and implement the strategy. These guidelines have the purpose lead the reader/designer through the matrix requirements.

3. A speculative process of how the Author imagines (given the lack of implementation in reality with children) how the strategy should be carried out. These steps are hypothetical, and children should have total control over how they develop and integrate the material.

4. Reference projects that have been identified share values and goals with each strategy.

STRATEGY COMPOSITION
(Example to compose a strategy)

2 These are the guidelines for designers to develop, run, interpret and implement the strategy.

STRATEGY NAME

PURPOSE

1. A concept collage reprents what is sought with the workshop, In this case, the places that could reflect a sense of belonging. And the purpose of holding this workshop.

HOW Here the designer explains the steps to carry out the workshop.

Elements to map/identify what is being asked in the question

Step one Provide an empy canvas, for example, a volumetric representation of a plaza. And a guiding question.

EVALUATION CRITERIA The designer defines the parameters to control and collect in this box during and after the workshop.

Elements to map/identify what is being asked in the question

Step two Map/identify what has been asked in the first step and continue with a second guiding question.

EXPECTED OUTCOME The elements that the designers must collect and integrate after the workshop goes in this box.

Elements to shape the last guiding questions.

Step three Acording to the guiding questions, children propose and reflect on what they want to express

IMPLEMENTATION This box contains some suggestions of how designers could use the outcome to propose designs that meet children's needs.

Outcome. A collage/physical model / drawing that expresses children's perception of the world.

REFERENCE PROJECT

3. Here is the material develop by children according to guidelines implemented by designers

4. Here is a project that shares similar characteristics to what the strategy is looking for.

note. The number of steps per strategy varies depending on the complexity of the interaction and the amount of information required.

ZAPATISTAS VALUES	APPROACH	WHAT WE NEED TO UNDERSTAND	STRATEGY	WHAT IS IMPORTANT
COMMUNITY	Psychological	CONNECTION with the community	1. COMMUNITY IDENTITY	Community's Behaviour & Composition
NON COMMERCIAL		Vision of the FUTURE	2. DRAWING THE FUTURE	Children's Development & Determination
PEACE	Pedagogical	SUPPORTING the community	3. COMMUNITY SKILLS	Activities & Needs
		ROLES of the community	4. COMMUNITY ROLES	Equity & Accesibility
EMPOWERMENT	Cognitive	Present community COMPOSITION	5. CRAFTING THE COMMUNITY	Community's characteristics Relationship with the context
ANTICOLONIALISM		RELATION to the physical environment	6. COLORS OF THE COMMUNITY	Impact of the physical space on children's life

Note. The matrix has been designed as an open tool, and its configuration is not definitive. Therefore, it is open to interpretations, and the creation of new links between values and approaches to create new strategies.

COMMUNITY IDENTITY

Fig#16 Community identity conceptual collage

PURPOSE

Foster children's psychological development is necessary to encourage their community awareness. Therefore, it is necessary to encourage adults to give up control of children's self determination.

A mental development of the child that allows to create links with the communities and understand the complexity of the environment would create stronger links and a more active participation for the well-being of the community.
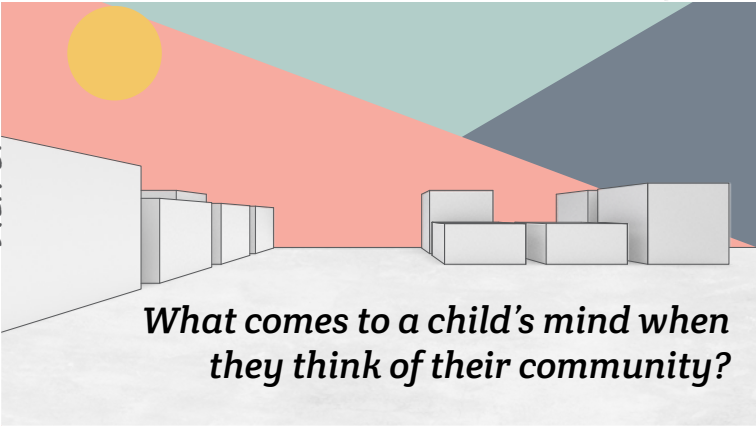
IMAGINARY OUTCOME MATERIAL

Step. 01

What comes to a child's mind when they think of their community?

Step. 02)

Step. 022

Descsription: These three collages present speculative scenarios of how children could identify their bonds with friends or family, the school, the community church, some animals or folk expressions.
The way to express these bonds could be done through cultural, historical, natural, or existing buildings where children make their life.

HOW

Provide an empty canvas for children to build their own idea of community.
Ask them a guiding question about their community.
Provide material (colors, pens, magazines, photographs) that children will use as reference elements to associate with their community and create a unique collage.

Present the material to parents, teachers and other people related to children's education.

EVALUATION CRITERIA

Children identify the elements link to their community (history, culture, tradition, cartoons, etc.). Then, describe their community's characteristics that they appreciate and like the most (and the least).

Adults identify the elements that children like and do not like within their community. Identify adults reflection about children's preferences.

Designers identify unconscious meanings of the elements and map where they can find those elements within the community. Then, verify the connection between the elements and the community's history, environment, culture, etc.

EXPECTED OUTCOME

The outcome should be represented with: 1)A catalog of photographs capturing the elements representing the sense of belonging and link to a map where these elements are located, 2) Posters with the collages made by the children. Each collage is accompanied by a description of what it feels like to belong to that community, and emotions attach specific elements.

The outcome is a reflection of elements and their characteristics attached to the sense of belonging to a particular community. It is also a list of the elements seen as least community representative and the reason. Understanding both sides of the story is necessary to create a clear picture of the community.

IMPLEMENTATION

Designers could implement the strategy to preserve the HERITAGE of the community. By identifying what children do not like and what makes every child feel part of the community, designers can change the narrative and bring back existing spaces for children.

Designers could also use the strategy to design spaces that STRENGTHEN the characteristics linked to children's mental development and awareness of their physical context. Spaces that meet children's needs can foster active participation in community building.

REFERENCE PROJECT

Dellekamp Arquitectos / Centro social las Margaritas

Comunal / Producción Social de Vivienda. ejercicio 01

DRAWING THE FUTURE

Fig#18 Drawing the future conceptual collage

PURPOSE

The construction of the future requires the ideas of those who will live it. Designers must understand those ideas to tackle present problems. Foster children's understanding of their relationship with the physical environment is necesarry meet a strong psychological development.

Through a process of imagination and recreation of the place where they would like to live, we can understand how kids perceive the present and future of themselves and their communities.

HOW

Provide an empty canvas for children to build their own idea of community.
Ask them a guiding question about their community in their future.
Provide material (colors, pens, magazines, photographs) that children will use as reference elements to associate with elements they want to have in the future.

In parallel, run round tables with adults to discuss how children perceive their present and future, and what is needed to address those dreams.

OUTCOME MATERIAL

Step. 01

What do children imagine will create a better community in the future?

Step. 02)

Step. 02.2

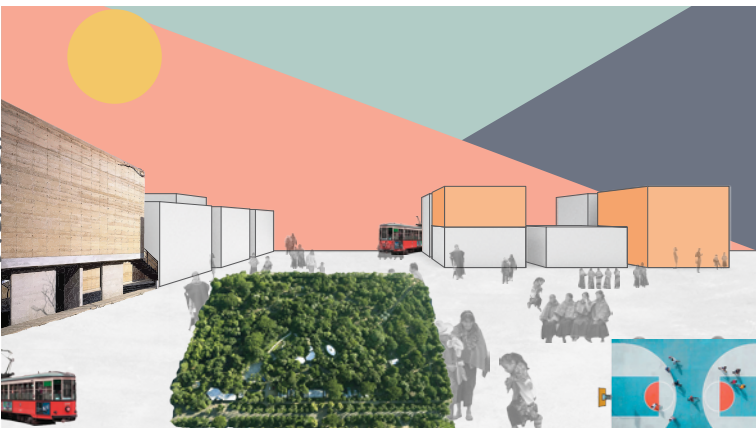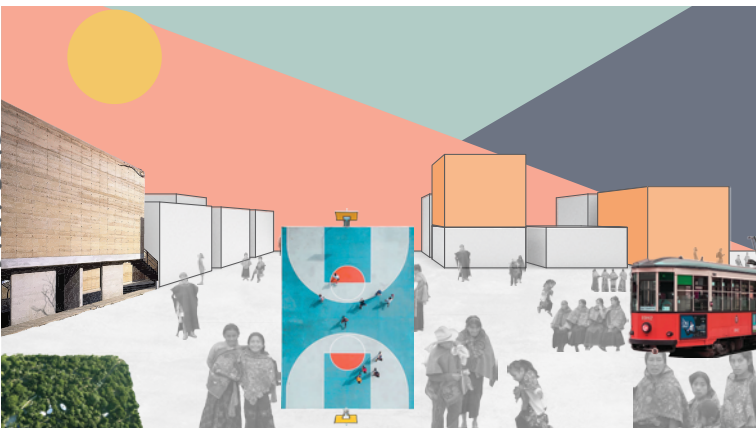*Description:* These three collages reflect on what a child could imagine would create a better community in the future in association with what the community lacks today.

It also reflects on how the elements are represented according to the size and proximity and what this could mean according to children experience.

EVALUATION CRITERIA

Children identify the elements that they would like to have to create a better community in the future. Then, describe why these elements will create a better community.

Adults identify children's expectations of the future and the elements they would like the community to have. Then, reflect on what they can do for the community to achieve these conditions.

Designers identify the variety of elements that were represented and not represented. Later, reflect on the meaning of these elements. Then, verify the connection between those elements and the community's present composition and dynamics.

EXPECTED OUTCOME

The outcome is a catalog of drawings and collages catching children's vision of themselves and the community in the future. Each composition is accompanied by a description of what represents every child's future.

The outcome is a report with an interpretation of every composition. The interpretation must meet a connection between the present and the future idea of the community.

It is also a list with categories of elements and the frequency with children representing them. Creating a database with what children want could foster the process of meeting their needs.

IMPLEMENTATION

Designers could implement the strategy to adapt existing buildings to children's needs and expectations of the future. By identifying what the community lacks or can be improved, designers can create spaces for children to develop their sense of community.

Designers could use the strategy to bring new approaches that meet children's future vision and foster their involvement in the process of empowering their communities. Spaces that build a tangible future for children can provide the necessary conditions for critical and autonomous development.

REFERENCE PROJECT

Urban plaza improvement, Iztapalapa

VEGA landskab / Wonder Wood – A Loop of Movement

COMMUNITY SKILLS

Fig#20 Conceptual collage community skills

PURPOSE

Transforming social conditions requires new skills that address future needs/problems. This strategy aims to understand what skills will be needed in the future through children's perceptions and needs, and how designers can create the conditions for this to happen.

IMAGINARY OUTCOME MATERIAL

STEP. 01

Where do children see male or famle adults every day?

STEP. 02

What do adults do in these spaces?

STEP. 03

Description: These three collages represent a speculative scenario where children identify where and how the community is built from economic, academic, sports activities, etc.
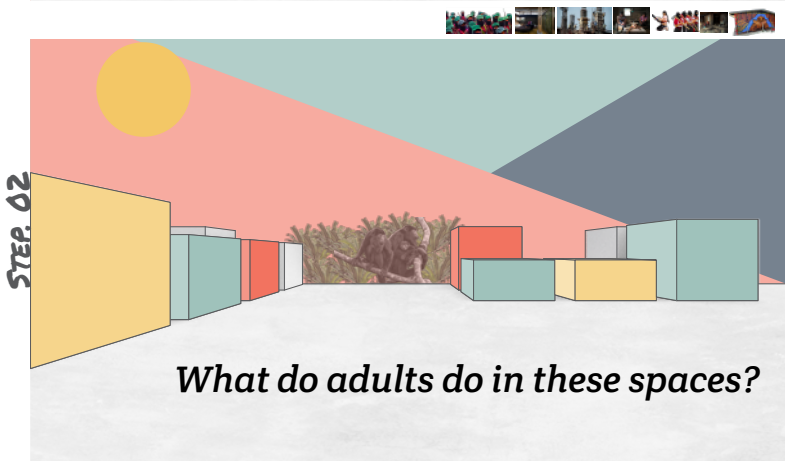
HOW

Provide an empty canvas and ask the children to identify where adults go daily and at night. The designers should guide children to associate activities with physical spaces within the community. Then, with a second (or more) guiding question like "What do adults do in these spaces?" children identify what kind of activities those adults performed in the mapped spaces.

In parallel, designer interview adults about what activities people do, what those activities look like, how they are affected by current problems and what they need to improve their living-working conditions.

EVALUATION CRITERIA

Children identified places and activities performed by adults. Then reflect on what characteristics they would like to acquire to help the community in the future.

Adults identify the different activities that sustain the community and describe how they look, what conditions they perform those activities, and what is needed to improve them.

Designers identify the skills children want to learn and where are the places where they would like to perform them. Then contrast how these activities are different or similar to present activities and what is needed to achieve the children's future vision.

EXPECTED OUTCOME

It is a catalog with every persona crafted by every child and a list of the different elements identified by children. Next, these characteristics must be classified into categories that meet community needs and well-being. Then, present a reflection on the skills and characteristics attached to the community.

The outcome examines how adults transmit the skills to children and what role education the context plays in this process. It also identifies how education benefits children to explore their mental and physical abilities and understand how education can bring new skills to empower children.

IMPLEMENTATION

The implementation of this strategy should aim to create conditions, like accesibility for every one, playful tools or playground areas, that allow children to explore their cognitive and physical development.

Designers could implement the strategy to intervene in spaces that provide the conditions for children to dialogue and reflect on what they want and what the community needs.

REFERENCE PROJECT

El coporito, Universidad Iberoamericana

Studio Anna Heringer / Desi Training Center

Note. Two or more strategies can be combined in a workshop that shares characteristics and objectives. In this case, the author considered that skills and community roles are linked, and their mapping and identification can be done with the same guiding questions.

COMMUNITY ROLES

PURPOSE

Empowering children means crate societies where gender equalities are a norm and not an exception. This strategy aims to comprehend how gender roles define the composition and daily life of the community. Therefore, mapping and associating the physical space with social interactions is needed to underestand present conditions.
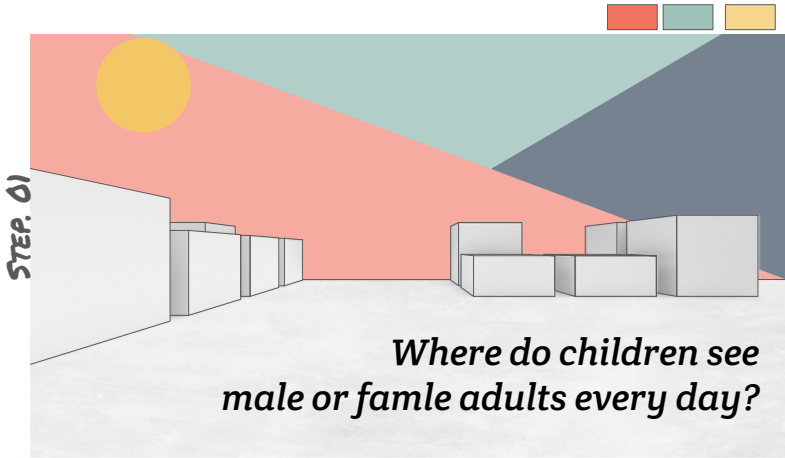
HOW

Provide an empty canvas and ask the children to identify where adults go daily and at night. The designers should guide children to associate activities with genders and physical spaces within the community. Then, with a second (or more) guiding question like "What do adults do in these spaces?" children identify what kind of activities do adults performed according to their gender.

In parallel, designer interview adults about what activities people do, what those activities look like, how they are influenced by gender roles.

IMAGINARY OUTCOME MATERIAL

Fig#20 Conceptual collage community skills

STEP. 01

Where do children see male or famle adults every day?

STEP. 02

What do adults do in these spaces?

STEP. 03

Description: These three collages represent a speculative scenario where children identify if the community is influenced by gender roles and how those define the different activities performed by every community member.

EVALUATION CRITERIA

Adults identify the relationship between activities, gender roles, ages, physical spaces and community structure.

Designers identify the relationship between children's perception of the community and what is happening in the community.

Children mapped and identified where they are allowed or not to participate in specific community activities/spaces and if this is related to their age or gender.

EXPECTED OUTCOME

A map that identified community physical and social composition. This map integrates different layers of where kinds and adults perform their activities (and where they do not), where they spend more time (and where they do not), and where they would like to spend time.

Collect data and graphics that identify members' characteristics, activities, and factors related to gender roles.

IMPLEMENTATION

Designers should use these maps to understand which spaces tend to segregate people based on gender. Consequently, designers must propose spaces or interventions that create an equal and safe space to promote gender equality between adults and children.

REFERENCE PROJECT

El coporito, Universidad Iberoamericana

Studio Anna Heringer / Desi Training Center

Note. Two or more strategies can be combined in a workshop that shares characteristics and objectives. In this case, the author considered that skills and community roles are linked, and their mapping and identification can be done with the same guiding questions.

CRAFTING THE COMMUNITY

Fig#24 Conceptual collage crafting the community

PURPOSE

Identify the spaces where children carry out their daily life and how the physical environment influences them. Therefore, the workshop intends to understand how children perceive their community and allow them to imagine the future of the community.
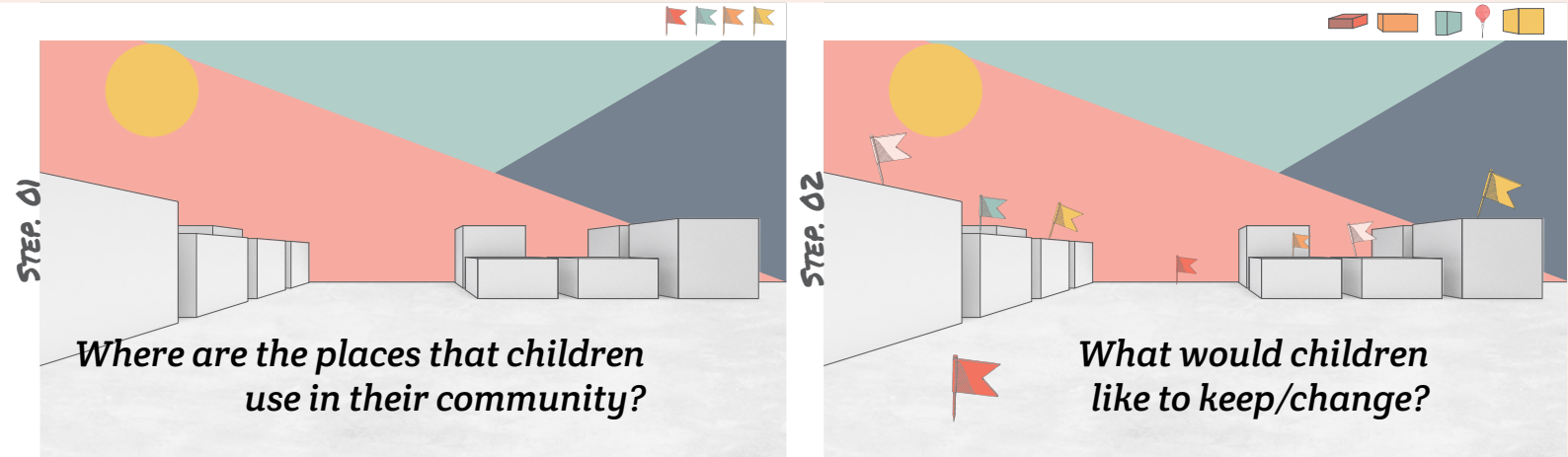
HOW

It is a workshop that uses cardboard, tape, glue and colors.
Firstly, a guiding questions are children to map their community and identify the spaces where they spend time, and what they like. Secondly, they build independent models of community elements. In addition, signs, symbols, or colors are added to indicate characteristics. With these elements, children make a representation of their community as it is.

Thirdly, based on the previous work, a guiding questions ask for change that will improve the community and children reorganize the model based on their ideal community for the future: What they would like to have, How to build a better community, and How children imagine their future children.

Finally, the models are presented to adults to discuss how the community should be transformed to benefit the children's development.

IMAGINARY OUTCOME MATERIAL

STEP. 01

Where are the places that children use in their community?

STEP. 02

What would children like to keep/change?

Description: These four collages speculate on the process of children mapping their community, crafting the elements they associate with their daily lives, what they like or want to change, and how they imagine a better future community organization.

STEP. 03

How would the new community look like?


STEP. 04

EVALUATION CRITERIA

What elements children represent and what characteristics are expressed in those models.
What color, symbols and signs are use to express emotions.
Size, positions and relationships between elements.
According to gender and age, What do children represent and want from their community?

EXPECTED OUTCOME

Photographic documentation.

The final model must help understand how children relate to their context, what they need to feel attached to their community, and how the physical spaces influence their state of mind and mental development.

The outcome is also a collection of the data that expresses what changes are proposed by children. This outcome should focus on understanding the characteristics that associate children with the building environmen.
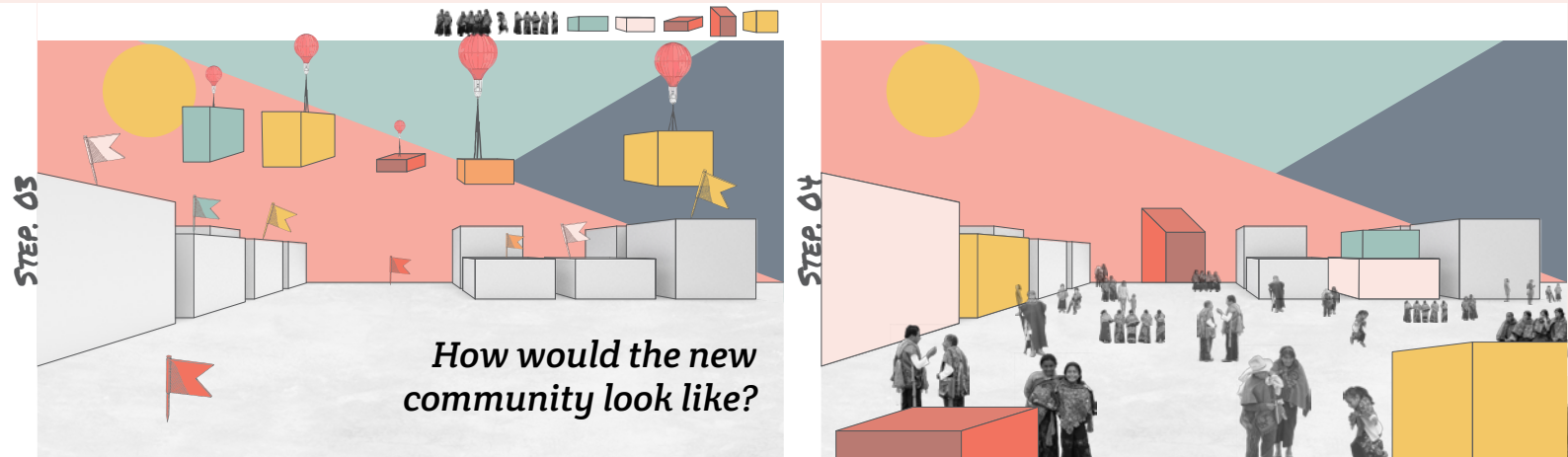
IMPLEMENTATION

Designers should implement the new knowledge on proposals that link and build bridges between the existing spaces and what is lacking within the community. Design according to children's physical and psychological needs.

It should help implement ideas that support what is working in the community, identify what is not working for the well-being of children, and propose ideas that create a solid and supportive physical environment.

REFERENCE PROJECT

CAUKIN STUDIO / Ranwas School

Francis Kere Architecture / Lycee Schorge

COLORS OF THE COMMUNITY

PURPOSE

The visual sense has a massive impact on how we perceive our context and how we behave in our society. Knowing this, this strategy aims to identify the colors that create an attachment between a child and its culture, community, and society. Consequently, designers can use the information to strengthen the bonding with the community.

Fig#25 Conceptual collage colors of the community

IMAGINARY OUTCOME MATERIAL

Description: This collage reflects and presents colors children could associate with their community and specific feelings, memories, or activities. The elements do not necessarily need to present a physical space, but they should focus on the effect of colors on children's daily lives.

HOW

Have an outdoor workshop with children to discover what they perceive within their community. Ask children to choose the colorful elements and why they select those elements. Provide some graphics to express feelings or emotions to facilitate the interaction.

At the same time, photograph the elements selected by the children. The photo map must capture every element mentioned by each child.

Secondly, a workshop to reflect on the community's colorful elements, what they mean and how they relate to a sense of belonging.

EVALUATION CRITERIA

Children identify the link between colors and their feelings and emotions. Then, explore how these colors are linked to specific areas within their community and what happens in those areas.

Adults identify the spaces where children feel bonded due to specific color characteristics. Then, they reflect on the role of these spaces and how children could appropriate their use.

Designers identify the meaning of the selected colors. Then, it analyzes the presence of those colors and what characteristics describe the elements that contain them.

EXPECTED OUTCOME

The outcome is a photographs mural of the colors/elements selected by children, accompanied by a reflection on what those colors mean and their relationship with the community. Each image should describe who chose it, where it was taken, and what emotions or feelings were associated.

With this, designers can build a catalog with specifications of each element associated with the colors and its role in children's perception as members of the community.

IMPLEMENTATION

Designers could implement the strategy using materials and elements with the colors selected to create or increase the sense of belonging, foster mental DEVELOPMENT, and REINFORCE positive feelings and community bonds.

Using colors in spaces that lack them could TRANSFORM the perception of spaces and accompany children in their involvement with the built environment.

REFERENCE PROJECT

Las Palmitas, Pachua

Active Social Architecture / Pre-Primary School

06

REFLECTION

When I chose this topic, I wanted to create a project that empathized with those who will live the worst of the consequence of the climate crisis.

To address this, I decided to investigate approaches that meet children's development to understand how their minds work. And, therefore, be capable of designing a methodology that fits their needs.
At first I had limited knowledge of these approaches, but studying them gave me the confidence to find a different perspective to achieve my goals.

This investigation led me to the awareness that I needed a pillar to support and provide a goal to achieve with the methodology: values to create better conditions of life.
They added a new valuable but also unknown element to the equation.

More over, the research phase gave me the confidence to support my initial idea: children's empowerment is one of the best way to create conditions for a prosperous and resilient future.
Nevertheless, we can not forget that changing social-economical-political structures is a long-term process that involves many factors that were not addressed in this work. Therefore, I imagine this work as a first step to encourage people to question and reflect on what is needed to change the wind's direction.

With this thesis, I wish to drive people into the reflection on the importance of bringing children's perspective into the design discussions. Involve children will enhance the transformation of unfavorable social and environmental conditions.

The most challenging moment was tackling the Zapatista values during this process.
On the one hand, there was no interaction with the communities since a field trip was initially not planned. I also ended up at a dead end trying to contact people who have worked with Zapatista 's communities.

On the other hand, I do not identify myself as an indigenous person. I came from the capital and I do not speak any indigenous language. I studied for 16 years in a private school and had the opportunity to do a Bachelor's degree. Even more, I had the enormous privilege of doing a master's degree in Sweden.

How could this privileged person have the right to study, interpret and suggest what is best for communities that he does not know, nor has he lived with, nor spoken with its inhabitants?

These internal struggles made me challenge and question my entire background, and through this experience, I understood that I needed to change the perception of my professional practice and be humble to face the problems and needs of others.

I believe that designers can make a significant and positive difference in the empowerment of children if we understand that changes must be made under CHILDREN'S CONDITIONS and GIVE UP the artificial power that society has withheld from adults. The future challenges need less shapers and more listeners and collaborators.

And take me back to the research question: *How can we bond the Zapatista school model and children's empowerment to bring their perspective to resilience design practices?*

I found the bond within the Zapatistas values. They preponderate the community's thriving over capitalist ideas, which is crucial for addressing a resilient future.

Therefore, by linking these values with participatory work among children, designers can acquire knowledge that speaks to us about children's desires, experiences and challenges that they experience every day.

This new knowledge must be used to impact the design practice and questions and challenge what we need to change and improve to create proposals that address what children need to discover what children need to exploit their abilities and find the necessary autonomy so that in the future, their decisions and actions are aimed at creating fairer and more equitable societies

With this thesis, I hope designers will find the inspiration to move their actions to create playful and strong ideas to bring children's perspectives into design practices and promote alternative ways to achieve the vision of a better future.

As this work is a theory-based and lacks children's participation, the *next step* is to test these strategies with children and analyze: How do children approach this content? Where do the strategies miss children's mind understanding? What is needed to improve the workshops? and How can the strategies be reshaped to create more robust and more assertive proposals?

07

REFERENCES

BOOKS

Awan, Nishat, & *Schneider*, Tatjana, & *Till*, Jeremym (2011).
Spatial agency: Other ways of doing architecture. Routledge.

Hooks, Bell (1994).
Teaching to transgrees, Education as the practice of freedom. Routledge.

Hooks, Bell (2003).
Teaching community, A pedagogy of Hope. Routledge.

Freire, Paulo (2014).
Pedagogía de la esperanza, Un reencuentro con la Pedagogía del oprimido [Pedagogy of Hope: Reliving Pedagogy of the Oppressed]. (2nd ed.) Siglo Veintiuno Editores.

Freire, Paulo (2013).
La educación como práctiva de libertad [Education, the practice of freedom]. Siglo Veintiuno Editores.

Williams, Sarah (2017).
Welcome to your world: How the built environment shapes our lives. Harper.

Khasnabish, Alex (2010).
Zapatistas: Rebellion from the Grassroots to the Global. Zed Books.

REPORTS

Consejo Nacional de Evaluación de las Política de Desarrollo Social (CONEVAL), (2019).
Pobreza infantil y adolescente en México 2008-2016: Dónde vive y qué características tiene la población de 0 a 17 años en situación de pobreza [Child and adolescent poverty in Mexico 2008-2016: Where do you live and what are the characteristics of the population between 0 and 17 years of age living in poverty]. United Nations International Children's Emergency Fund (UNICEF). https://www.coneval.org.mx/Medicion/Documents/UNICEF_CONEVAL_POBREZA_INFANTIL.pdfV

Instituto Nacional de Estadística, Geografía e Informática (INEGI). (2022, February 24).
Indigenous situation. https://www.inegi.org.mx/temas/lengua/#Informacion_general

Instituto Nacional de Estadística, Geografía e Informática (INEGI). (2022, March 15).
2020 Censo de población y vivienda (2020 Population and Housing Census). https://www.inegi.org.mx/contenidos/programas/ccpv/2020/doc/Censo2020_Principales_resultados_EUM.pdf

Instituto Nacional para la Evaluación de la Educación (INEE). (2022, April 25).
Principales cifras nacionales. Educación básica y media superior (Main national figures. Basic and upper secondary education). https://historico.mejoredu.gob.mx/wp-content/uploads/2019/01/P2M109.pdf

ARTICLES

Thiery, W., Lange, S., Rogelj, J., Schleussner, C.F., Gudmundsson L., Seneviratne, S.I., Marina Andrijevic, Frieler, K., Emanuel, K., Geiger, T., Bresch, D. N., Zhao, F., Willner, S. N., Büchner, M., Volkholz, J., Bauer, N., Chang, J., Ciais, P., Dury, M., François, L., Grillakis, M., Gosling, S. N., Hanasaki, N., Hickler, T., Huber, V., Ito, A., Jägermeyr, J., Khabarov, N., Koutroulis, A., Liu, W., Lutz, W., Matthias Mengel, Müller, C., Ostberg, S., Reyer, C. P. O., Stacke, T., Wada, Y. (2021).
Intergenerational inequities in exposure to climate extremes: Young generations are severely threatened by climate change. Science, 374(6564), https://doi.org/10.1126/science.abi7339

Barrett, P., Zhang, Y., Moffat, J., Kobbacy, K. (2013).
A holistic, multi-analysis identifying the impact of classroom design on pupil's learning. Building and Environment, 59, 678-689. https://doi.org/10.1016/j.buildenv.2012.09.016

Silva, C. (2019).
The zapatista school: educating for autonomy and emancipation. Alteridad, 14(1), 109-121. https://doi.org/10.17163/alt.v14n1.2019.09

Jara, O. (2010).
Popular education and social change in Latin America. Community Development Journal, 45(3), 287–296. https://doi.org/10.1093/cdj/bsq022

Guerrero, M. (2018).
La educación en México a través de los tiempos: cambios y reformas [Education in Mexico through the times: changes and reforms], 6 (11). www.revistaglosa.com.mx / ISSN: 2448-766X.

López, S., Flores, M. (2006).
Las reformas educativas neoliberales en Latinoamérica (Neoliberal educational reforms in Latin America). Revista Electrónica de Investigación Educativa, 8 (1). http://redie.uabc.mx/vol8no1/contenido-flores.html

WEBSITES

Koblin, J. (2020, October 29).
Paget's Theory of Cognitive Development. Sprouts. Retrieved 2022/02/14. https://sproutsschools.com/piaget-cognitive-development-theory/

Koblin, J. (2021, April 21).
Democratic School Education. Sprouts. Retrieved 2022/02/26. https://sproutsschools.com/democratic-education/

Steadman, I. (2013, January, 03).
Study: School Design Can Significantly Affect Children's Grades. Retrieved 2022/02/22. https://www.wired.com/2013/01/school-design-affect-grades/

Lewis, R. (2020).
The Concrete Operational Stage of Cognitive Development. Retrieved 2022/02/22. https://www.healthline.com/health/childrens-health/concrete-operational-stage

Pérez, C. (2021, April, 30).
La guerra contra las drogas en México no empezó ayer (Thw drug war in Mexico didn't start yesterday). Retrieved 2022/05/10. https://www.animalpolitico.com/bitacora-de-violencias/la-guerra-contra-las-drogas-en-mexico-no-empezo-ayer/

United Nations (2022)
Sustainable Development Goals. Retrieved. 2022/05/10. https://sdgs.un.org/goals

IMAGES

Figures #1 to #26 made by the author.

Image 02.01.
De Agostini (2016) Retrieved 2022/03/07.
Mexico - Chiapas State - Woman and child carrying firewood. Photograph. Britannica ImageQuest, Encyclopædia Britannica, 25 May 2016.
quest-eb-com.eu1.proxy.openathens.net/search/126_538900/1/126_538900/cite

Image 02.02.
Bocxe, W. (2017) Retrieved 2022/03/07.
Children in Chiapas, Mexico. Photograph. Britannica ImageQuest, Encyclopædia Britannica, 31 Aug 2017.
quest-eb-com.eu1.proxy.openathens.net/search/139_1866493/1/139_1866493/cite

Image 02.03.
De Agostini Picture Library (2016). Retrieved 2022/03/07.
Sumidero Canyon, Sumidero Canyon National Park, Chiapas, Mexico. Photograph. Britannica ImageQuest, Encyclopædia Britannica, 25May 2016.
quest-eb-com.eu1.proxy.openathens.net/search/126_507342/1/126_507342/cite

Image 02.04.
Magallon, G. (2016) Retrieved 2022/03/07.
Members of the Mexican Indian rebel group Zapatist. Photographer. Britannica ImageQuest, Encyclopædia Britannica, 25 May 2016.
quest-eb-com.eu1.proxy.openathens.net/search/115_2760389/1/115_2760389/cite

Image 02.05.
Escuela Primaria Rebelde Autonoma Zapatista (2010). Retrieved 2022/03/07.
From Wikimedia Commons, the free media repository, 24 July 2010.
https://commons.wikimedia.org/wiki/File:Escuela_Primaria_Rebelde_Autonoma_Zapatista.jpg

Image 02.06.
Universal Image Group (2016). Retrieved 2022/03/07.
Portrait of a Tzotzil Maya (an indigenous people with linguistic and cultural ties to otherhighland Maya people) child in Zinacantan, Chiapas, Mexico. December 21, 2007.
quest-eb-com.eu1.proxy.openathens.net/search/300_3197252/1/300_3197252/cite

Image 02.07.
Universal Image Group (2016). Retrieved 2022/03/07.
Portrait of Tzotziles (an ethnic group of the Mayas) mother and child on the market day at San Juan Chamula (Ethnic community) in the stateof Chiapas Mexico. December 21, 2007. Photography. Britannica ImageQuest, Encyclopædia Britannica, 25 May 2016.
quest-eb-com.eu1.proxy.openathens.net/search/300_3214055/1/300_3214055/cite

Image 02.08.
De Agostini Picture Library (2016). Retrieved 2022/03/07.
Mexico 20th century - Chiapas State - San Cristobal de Las Casas- Handmade dolls dressed as Zapatist revolutionaries sold at the market. Photograph. Britannica ImageQuest, Encyclopædia Britannica, 25 May 2016.
quest-eb-com.eu1.proxy.openathens.net/search/300_3214055/1/300_3214055/cite

Image 02.09.
Ruifo. Retrieved 2022/03/07.
Los altos de Chiapas
https://wordpress.org/openverse/image/d92e1bf7-b993-4df0-bd6b-b16c2a3d1cbc

Image 02.10.
Wesley Bocxe (2017). Retrieved 2022/03/07.
Villagers in Chiapas, Mexico. Photograph. Britannica ImageQuest, Encyclopædia Britannica, 31 Aug 2017.
quest-eb-com.eu1.proxy.openathens.net/search/139_1866494/1/139_1866494/cite