



A shared habitat to protect biodiversity

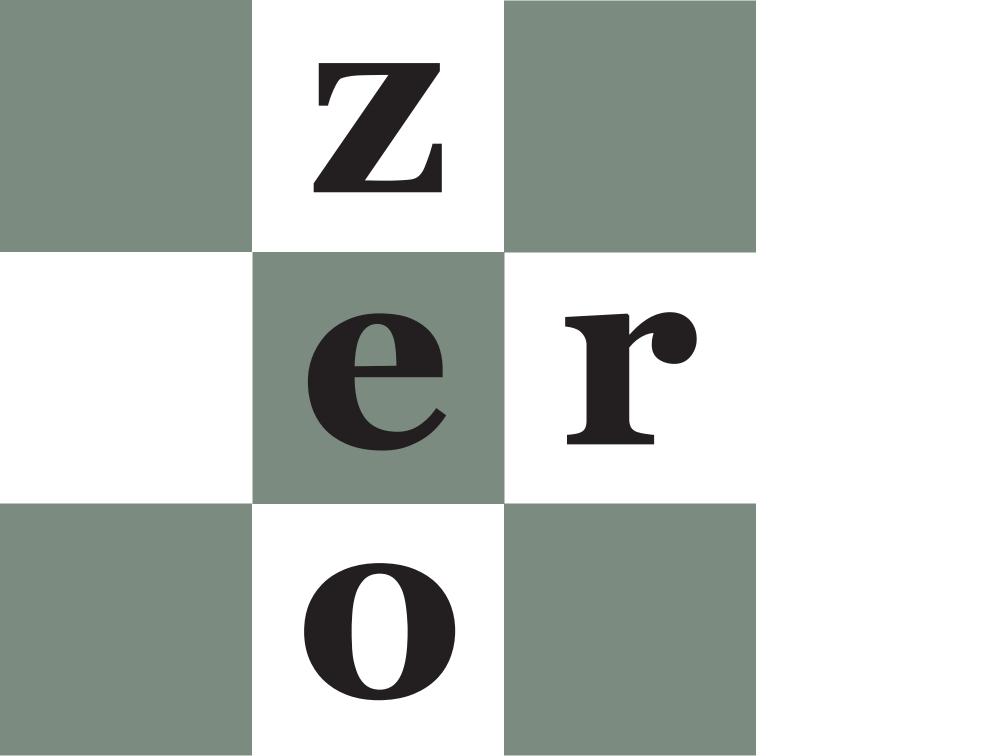
Master thesis in Integrated Product Design - IP2 A. A. 2022-2023

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zero - intro	4
one - on the blink of precipice	16
two - a gradual uprise	23
<i>three - near but distant</i>	30
<i>four - portrait of the user</i>	44
five - touchpoint between man and nature	68
six - the "touring the city" concept	77
seven- what's coucou?	90
<i>eight -</i> la phase marseillaise	94
nine - we're in need of bird boxes	104
ten - framing the solution	116
eleven - tale testing	130
tewlve - the making of	144
thirteen - how does coucou work?	168



in tr 0

tesi magistrale

{0.0 ABSTRACT: LET'S GET CLOSER TO THE WORLD WE WOULD LIKE

The city hosts an incessant coming and going of people and cultures, can they all feel included? The following paper aims to analyse the mechanisms of human interconnectedness through ethnographic studies. To create an inclusive and welcoming product, it is necessary to analyse the city, the historical events that led to its formation and development, its users and how they perceive the urbe. Through the guidance of leading sociologists, philosophers and literary scholars, the question of urban identity, a fundamental accessory for a respectful and collaborative user, was investigated. There was a desire to give space to all urban users, with particular attention to those categories often forgotten because they are outside working life. There was also a desire to include in the definition of 'city dweller' all those non-human species that populate the urban terrain and skies. An in-depth look at the issue of urban biodiversity, which must be protected and safeguarded. There is also a debate on climate change and how future generations will cope with the problems. In addition to these, it is also about all the younger citizens, those who will concretely live the future that we are trying to improve today, those in whom the feeling of urban identity can and must arise to generate responsibility and attachment to place. The paper takes a wide-ranging, yet simple look at the world to come, at the pivotal themes of inclusiveness and cultural enrichment provided by the multitude of peoples living in the city, and at the importance of the freedom that only the urban dweller possesses.

tesi magistrale

$\{0.1^{input: il ragazzo}_{della via gluck}$

Questa è la storia di uno di noi anche lui nato per caso in via Gluck in una casa fuori città, gente tranquilla che lavorava

Là dove c'era l'erba, ora c'è una città e quella casa in mezzo al verde ormai dove sarà?

Questo ragazzo della via Gluck si divertiva a giocare con me. Ma un giorno disse: «Vado in città» e lo diceva mentre piangeva. lo gli domando: «Amico, non sei contento? Vai finalmente a stare in città. Là troverai le cose che non hai avuto qui, potrai lavarti in casa senza andar giù nel cortile!»

Mio caro amico disse: «Qui sono nato in questa strada ora lascio il mio cuore. Ma come fai a non capire? E' una fortuna, per voi che restate, a piedi nudi a giocare nei prati mentre là in centro respiro il cemento. Ma verrà un giorno che ritornerò ancora qui e sentirò l'amico treno che fischia così: "wa wa"!»

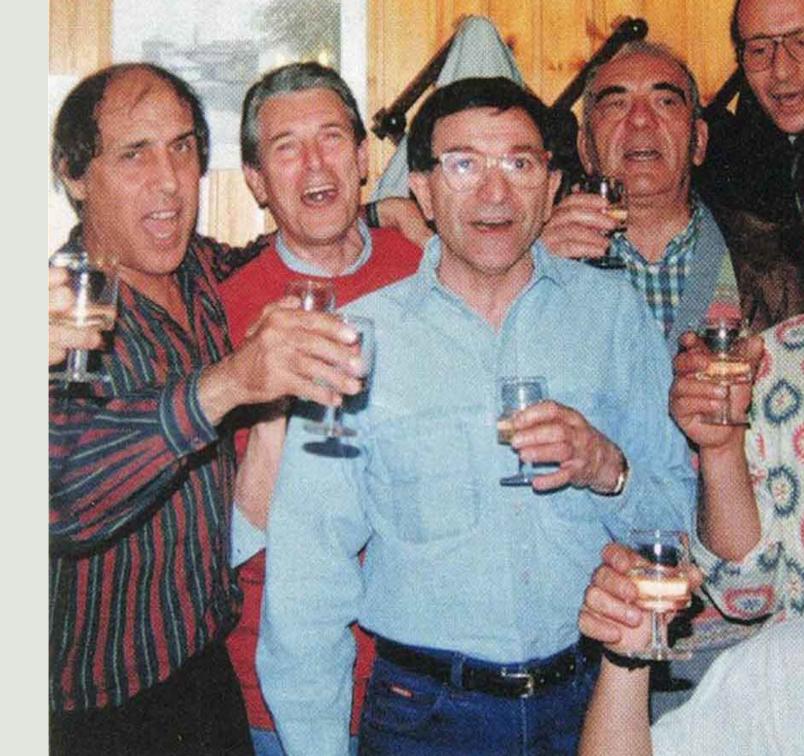
Passano gli anni, ma otto son lunghi, però quel ragazzo ne ha fatta di strada. Ma non si scorda la sua prima casa, ora, coi soldi lui può comperarla. Torna e non trova gli amici che aveva, solo case su case, catrame e cemento. This is the story of one of us. he also was, by chance, was born in Via Gluck. in a house outside the city, where people are quiet and hardworking

Where there was grass, now there is a city and that house surrounded by greens, by now, where can it be?

This boy from Via Gluck enjoyed playing with me. But one day he said to me: «I'm going to the city» and he wept as he said so. I ask him: «Dear friend, aren't you happy? you will be finally live in the city. There you can find all the things you didn't have here, you can shower in your home without walking down into the courtyard!»

My dear friend said to me: «I was born here, I now leave my heart in this street. How do you not understand? you guys staying behind are the lucky ones playing barefoot in the meadows while downtown I breathe concrete. But there will come a time when I'll return back here and i'll hear my friend, the train that whistles like so: "wa wa!"»

Years go by, but eight are so many though the boy has come a long way. Still he does not forget his first home, now, he has money and can buy it. He returns and does not find the friends he had, only houses upon houses, tar and cement.



Là dove c'era l'erba ora c'è una città e quella casa in mezzo al verde, ormai dove sarà? Eh... non so, non so perché continuano a costruire le case e non lasciano l'erba non lasciano l'erba non lasciano l'erba non lasciano l'erba

Eh, no

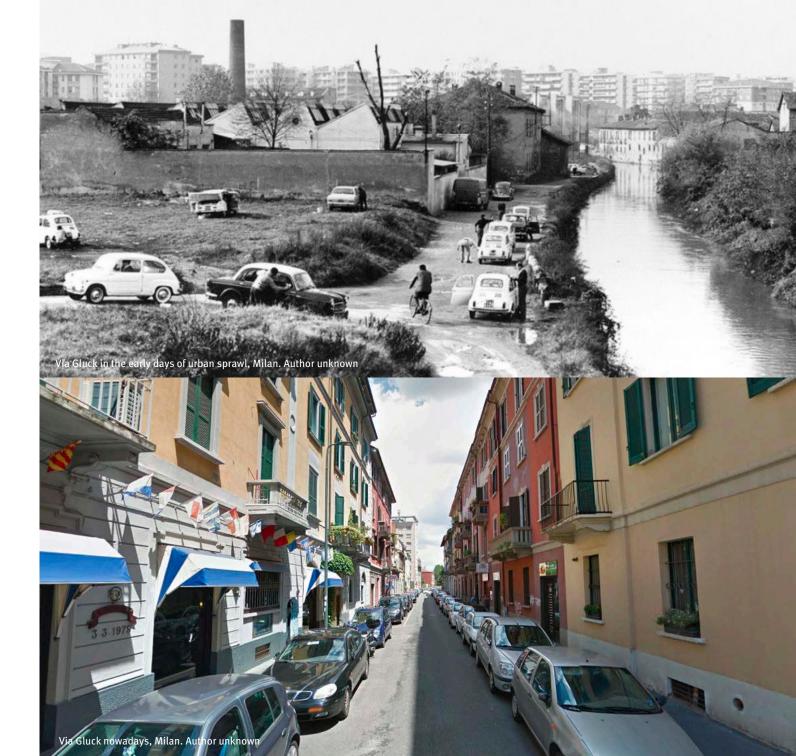
se andiamo avanti così, chissà come si farà chissà... Where there was grass there now is a city and that house surrounded by green, by now where can it be? Eh... I don't know, i don't know why they continue to build houses and they leave no grass they leave no grass they leave no grass they leave no grass

Eh no,

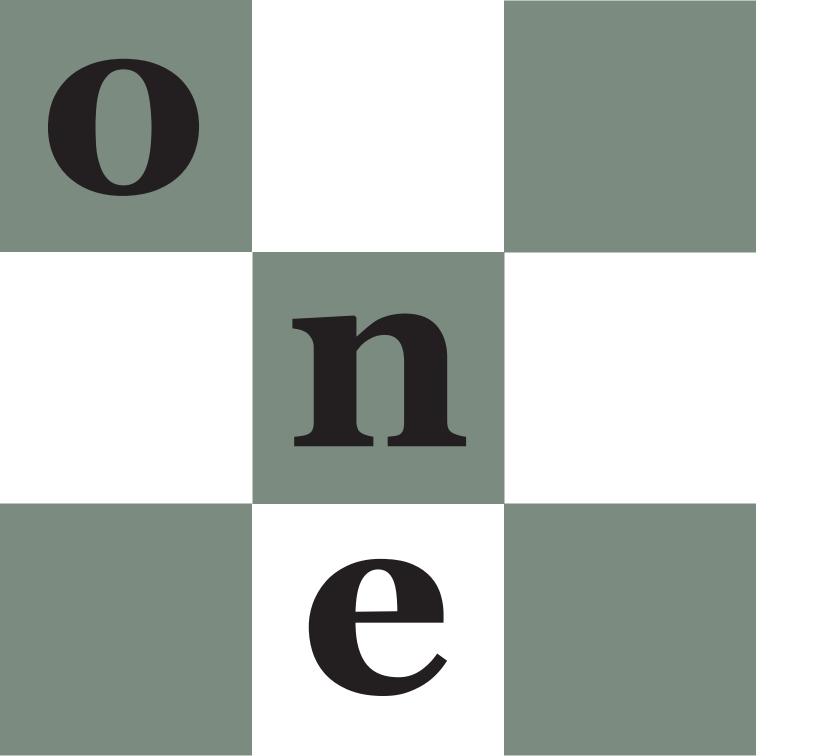
if we are progressing like this, who knows how we will end up who knows...

Listen to the song here





This famous song by Adriano Celentano, written in the sixties, was the fuse that gave me the idea for my thesis: I wanted to talk about how the world has changed, become more and more artificial and less natural. Analysing the preference of consumerism and the reversal that gen Z is making.



on the brink of preci pice





{1.1 WE ARE LIVING ON TWO EARTHS

The essential characteristic of any urban settlement is the existence of a marketplace where to exchange goods. This definition was given in 1922 by the German sociologist Max Weber, in his essay entitled 'The City'. Although this identification is now a hundred years old and coming from a different socio-historical context, Weber's statement still retains a strong identity today. Nowadays, commodities are no longer just tangible goods, but also services and communication flows. The quantity and availability of these defines the importance of a city and its ability to become a pole of attraction for the surrounding area.

Over the years, the urban environment has established itself as the primary example of macroscopic human intervention in its own ecosystem, the one of the Earth.

In order to proliferate their activities, men have begun to transform the natural resources at their disposal, a phenomenon that has led to their inexorable exploitation and the disruption of the Earth's equilibrium. The many activities that take place in the city on a daily basis require a constant supply of resources: water, raw materials, energy, fuels. The risk is to run out of them. Actually this event already occurred for the first time in 1971, when Earth Overshoot Day (EOD) was recorded on 25 December, the day on which man exhausts the earth's resources for the current year. In 2022, the world EOD was on 28th of July. This happens to be a 'slowed down' datum because less industrialised countries were included in the statistics (e.g. the EOD in Mali occurred on 21 December). If we

just consider the individual Italian consumption, we calculate Earth Overshoot Day on 15 May, which means 1.75 Earths are being consumed annually by italians.

THE "SUSTAINABLE DEVELOPMENT"

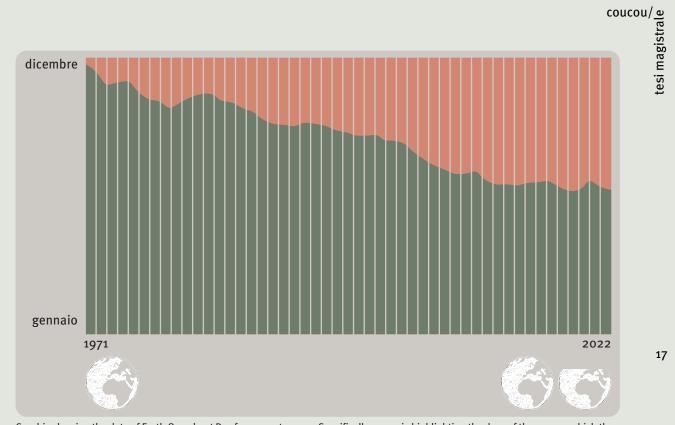
The concept of the "sustainable city" was born in the 1990s. This is a more concrete declination of 'sustainable development' (Brundtland Report, 1987): 'that development which allows the present generation to satisfy its needs without compromising the possibility of future generations to satisfy theirs'.

The lack of awareness of one's own actions is one of the aggravating factors in human behaviour that is harmful to the Earth's biocapacity. Environmental thinking struggles to concretely act because people do not receive warm and close narratives to their own experiences.

Science looks at nature closely, while economics relates to it with absolute detachment: its end is profit; therefore, it considers the planet as a productive factor or a mere support to be consumed and exploited in order to achieve goals.

THAT'S WHAT MACHIAVELLI

The famous phrase 'the end justifies the means', wrongly paraphrased from Machiavelli's 'The Prince', simplifies a much deeper concept theorised by the Italian historian and philosopher. The salvation of the state is necessary and must come



Graphic showing the date of Earth Overshoot Day from 1971 to 2022. Specifically, green is highlighting the days of the year on which the Earth's biocapacity manages to provide for human consumption; while orange is showing the days of the year on which humanity consumes resources that are not produced by planet Earth in the current year, i.e. the so-called 'overshoot days'. Source: Overshootday

before the Prince's personal conceptions, since he is not the master, but the servant of the state, arguing that anyone who believes he can do or say whatever he wants is crazy. You can use any means to an end, as long as the end to be achieved can benefit the one being addressed and not harm others, thus when the end is not only benevolent to the one doing the deed. This is because, if this were not the case, the person who set out to achieve an end would be the only one to enjoy the

16

results, and this would be identified with tyranny and selfishness. A reflection well applied to the relationship between economics and terrestrial exploitation.

$\{1.4^{A CHANGE}$ IN PERSPECTIVE

In order to minimise the waste produced by the human race, the concept of circularity was born. "The circular economy is a production and consumption model that involves sharing, lending, reusing, repairing, reconditioning and recycling existing materials and products for as long as possible". The product life cycle is extended, in fact, when an object ends its function, however, its component materials are reintroduced into the economic system wherever possible. Each product saved from landfill have multiple uses because their application in the production cycle is continuous.

The Circular Economy is opposite concept to the more traditional Linear Economy, a practice in which raw material is extracted, processed, transformed into a product, used and then discarded. Giving value to an exhausted product is a necessary practice to safeguard today's world that has seen the flourishing of disposable practices for too long.











cessary.

Urban greenery contributes to enrich the city's

biodiversity, as it creates a habitat for many ani-

mal and plant species. In this way, man-made tri-

vialisation of the ecosystem is counteracted and

As more and more people live in cities, the restoration, conservation and enhancement of biodiversity in urban areas become important and ne-

Trees for 100 inhbitant Mantova 111,90 62.60 Brescia Reggio nell'Emilia 42,70 40,30 Arezzo 34,70 Ravenna 34,30 Pordenone Mantova 32,90 Rimini (32,90 Bergamo 31,70 Perugia 29,10 28,80 Vercelli 26,30 Gorizia Cuneo 25,30 25,10 Cosenza Forlì 24,80 Biella 24,40 23,80 Treviso 23,60 Udine (23,60 Massa 23,40 Padova

Image 2: The data show the number of trees per 100 inhabitants from the last census, as of 31 December 2019. The top 20 Italian capitals with the most trees are ranked. Source: Istat

nature conservation is promoted.

It has been studied how green areas also improve the quality of life from an economic point of view: the presence of vegetation attracts tourists and buyers, houses with gardens or adjacent to green areas have a higher market value. Parks, gardens, villas and protected areas require maintenance and jobs are created (Urban & Community Forestry, 1997; Savard, Clergeau & Mennechez, 2000).

It is interesting to note how, in the adjacent graphic, the major Italian cities do not appear in the statistics. The millions of people residing in metropolitan cities such as Rome and Milan, but not only there, do not enjoy enough of the benefits that a green area brings to the quality of life.

2.2 URBAN BIODIVERSITY

Three-quarters of all land on Earth has been significantly affected by human activities. Urbanization is increasing, and more than four out of five Canadians are now living in urban centres. As urban and periurban areas grow in population and size, pristine natural spaces disappear. At the same time, cities depend on healthy natural environments to provide benefits, also known as ecosystem services. Ecosystem services include trees producing the oxygen we breathe, bees pollinating the crops we eat and wetlands filtering the water we drink. Restoring nature and enhancing biodiversity is essential to helping our communities – as well as the people and wildlife who live in them – become resilient to the climate crisis. City growth doubled over the last century; almost

altered habitat.

tural habitat. species.



The Earth is alive, it acts and reacts to human actions, it transforms and human life depends on the air one breathes and the food one eats; therefore, nature is not an abstract entity, but a life companion to be cared for on a daily basis.

22

216,000 square kilometres of intact forests were disturbed between 2000 and 2013, and over 80 per cent of original wetland habitats were converted. Dams, canals, buildings and roads have also

Habitat loss, from forestry, agriculture, urbanization and industrial development, is the greatest threat to species in Canada. Wildlife and habitats that were once abundant are becoming rarer, or have disappeared altogether, as a result of larger ecosystem changes.

The growth of cities contributes to biodiversity loss by fragmenting and destroying areas of na-

Urban areas have the potential to pollute our air, water and soil in many ways, including industrial waste, road salts, agricultural runoff, and sewage. International trade, transport and gardening can relocate species to new areas, threatening native

Increased flood risks, rising temperatures, more heatwaves and the urban heat island effect pose a threat to wildlife and humans.

{2.3 URBAN REGENERATION

One of the various tools at mankind's disposal to nurture a circular perspective is the practice of urban regeneration, which consists of the creation

of facilities that can promote the economy, environment and social profile of an area in a sustainable way. In the last decade, urban regeneration has progressed asserting itself as a multi-participatory approach to give cities not only a new and competitive look, revitalising their territorial image on an aesthetic level, but also giving them a new lease of life from a cultural point of view, improving the well-being, community and identity of the local community. It is a phenomenon with various declinations: renovating public buildings, demolishing unauthorised buildings, improving the quality of life of citizens, having more services aimed at sociality, more sustainable mobility, promoting cultural and sporting activities in reclaimed spaces.

{2.3.1 GENTRIFICATION: TOP OR FLOP?

In 1967, the English sociologist Ruth Glass theorised Gentrification, a phenomenon born of urban regeneration that aims to indicate the progressive socio-cultural change of an urban area from proletarian to middle-class following the purchase of real estate. Today, the upper-middle classes are the only ones who can afford to rent flats in the

> city centre because they are clearly better off. The redevelopment of the city centre pushes the lower middle-income classes out of it, and, in parallel, the abandonment of the central areas gives the upper-middle classes an incentive to buy still rundown properties and renovate them.

The concept of Gentrification originated to explain the phenomenon that occurred in the

1960s in Islington, a scruffy neighbourhood in north London where the middle class had decided to take homes in working-class neighbourhoods, thus driving up the value and, consequently, property prices. The word derives from gentry, which means 'little nobility' in English.

Jobs have also changed: while for a long time



in the 1900s most jobs were in factories on the outskirts of cities, since the 1980s the fastest growing sectors have been finance, services and technology companies, which are almost always physically located in city centres.

The demand for houses in city centres has therefore increased, often without sufficient supply. Houses in city centres are few and often very expensive. This is why those who wanted to live in the city started to look at the neighbourhoods where the poorer sections of the population lived. Traditionally, the first people to move into these neighbourhoods were artists, intellectuals and people generally identified as bohemians, attracted by the lower prices, the authenticity of the places and the non-conformist choice to live there. As more and more people moved into these neighbourhoods, so did those who wanted to make a living there: houses, often old and in poor condition, were renovated, disused industrial buildings were converted, and the city was transformed into a new, more modern and more fashionable place to live.

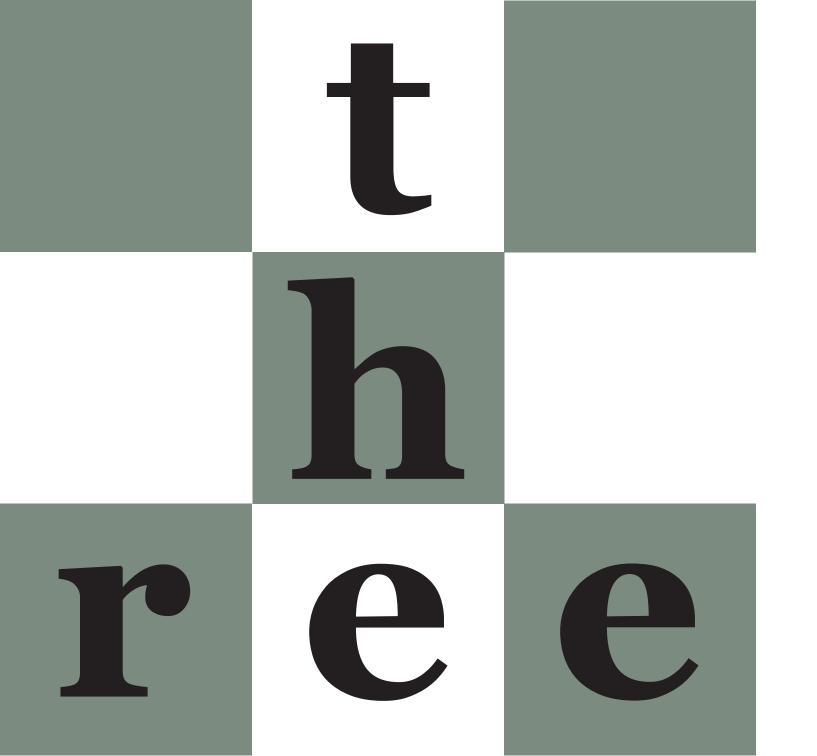
The price of houses in these neighbourhoods began to rise. New shops also arrived, from supermarkets to smaller, trendy shops specifically for the new neighbourhood residents.

Many 'gentrified' neighbourhoods became in time victims of their own success. The first 'new inhabitants' of the neighbourhoods, the artists, were often the first to leave them: the new buildings, the increase of new residents and shops, and the disappearance of the old ones, led most 'gentrified' neighbourhoods to lose their new authenticity and original identity, which had been one of the reasons for triggering the phenomenon. Among the most famous examples of 'gentrified'



Activists block a Chicago street to protest Gentrification and displacement, 2016. Photo by Tyler Lariviere via Planning

neighbourhoods are, for example, Williamsburg in Brooklyn (New York), Shoreditch in London, Pigalle in Paris, Kreuzberg in Berlin, Isola in Milan, Testaccio in Rome and San Salvario in Turin. tesi magistrale



near but dis tant









3.1 THE MULTIPLICITY OF URBAN FLOWS

The movement of people creates cultural biodiversity among the city's population, and not a few people in literature and sociology have sought to schematise this through studies in urban ethnography. Guido Martinotti, sociologist and acute observer of the social organisation of 20th-century Milan, theorised the essential differentiation between urban users, that between residents and commuters. The former are those who live, work and consume within the city; while the latter category groups all those users who go to the city every day exclusively to work, but carry out their life and consumption elsewhere. Commuting is one of the most significant phenomena of movement within the territory which, in the case of Milan, involves about 200,000 users every day. Martinotti's distinction then continues in more detail. There are City Users, individuals who travel to the city to use services, public or private, temporarily, motivated by a cultural and recreational interest, an essential difference with the commuter category. These users can be described either as tourists or as frequenters of shopping centres or nightclubs, no matter how long their stay in the city lasts. Metropolitan Businessmen are those who undertake trips to cities for economic and work reasons, they are distinguished from commuters because they generally stay overnight. Have you ever paid attention to that category of people



who wander the city streets idly, unhurriedly, experiencing emotions simply by admiring the surrounding landscape? These are the so-called flâneurs (he who strolls), a term made famous by the well-known French poet Charles Baudelaire, whose paternity can be traced back to the German philosopher Walter Benjamin. Finally, it is important to mention all those homeless people, who lead a life of travel, simplicity and marginality, sometimes doing casual work. The most famous de-

finition of this category was given in 1923, when The Hobo, a study by Nels Anderson, was released, which told precisely about the unknown lifestyle of vagrants during the American Golden Age. This resulted in the 1970s in the hippie movement and, to this day, couchsurfing or backpacking can be considered forms of hobo culture.

It is convenient to be able to divide the urban population into classes and categories. It is essential to define how many young, old, foreign,



${3.2}$ the indifferent city

rich and poor live in a country in order to be able to study and describe its ethnography. This plurality of differences allows the child born and raised in the city to become a world citizen early on, to savour many lives simply by observing the lives of others. He will retain an open point of view when confronted with the various dynamics he will present during the course of his life. The urban settlement could theoretically represent a place of togetherness, but this is not what happens. Fifty-six per cent of respondents to the Domi Social (2021), the condominium social network, stated that they have little or no relationship with their neighbours, while 25 per cent of them claimed not to know those living on the same landing. The urbe makes many goods and services available to its users all the time. Few citizens would ring Mrs Assunta's doorbell to ask her for some sugar, many would instead go to the 24-hour Carrefour on the doorstep. Having everything at one's disposal makes it possible to never ask others for help. Today's hectic and dynamic life tends to distance city users from each other, a task historically assigned to urban planning.

The German sociologist Georg Simmel theorised that one of the most interesting peculiarities of the metropolitan individual is the blasé attitude. It is a kind of indifference or insensitivity to differences. This is due, on the one hand, to the excessive nervous stimulation caused by the hustle and bustle of the city, and, on the other hand, to the anaffectivity of the monetary economy, which ruthlessly zeroes in on the individual significance of everything. The metropolitan man can call himself free. Thanks to his status as a citizen, he finds himself freed from those prejudices that hinder the life of the provincial inhabitant. This, however, does not necessarily lead to an increased sense of well-being; on the contrary, very often the city dweller feels lost and abandoned despite living close to many people.

3.3 A "MOSAIC OF TINY WORLDS"

According to Robert Park, a US journalist, in the city environment, various human groups experience a kind of 'competition for space'. Neighbourhoods with different characteristics and functionalities are created that often give rise to 'symbiosis', i.e. forms of mutual collaboration, a 'mosaic of small worlds', as Park defines them, culturally distinct from each other, but physically close. For example, it may happen that a neighbourhood with a strong cultural character, intended to house universities and libraries, stands next to a slum. Paradoxically, this creates in individuals the conviction, or illusion, that they can pass by a neighbourhood with a strong cultural character.



The 15-minute city was born in 2016 from the intuition of the French-Colombian scientist Carlos Moreno. It is a simple concept: most of the daily needs of residents can be met by walking or cycling directly from their homes. This urban residential model was popularised by the mayor of Paris Anne Hidalgo. In 2020, she announced how this innovative and inspiring idea would make the French capital a 15-minute city: 'la Ville des proximités'.

The Covid-19 pandemic and the subsequent economic crisis have completely transformed citizens' lifestyles and our current context, so the urgency to establish this model to 'return to a local lifestyle' may increase.

3.4 THE 15-MINUTES CITY CONCEPT

15-minute cities are built from a series of 5-minute neighbourhoods that would lead to the development of a polycentric city, where proximity brings prosperity as well as a dense network of social and productive ties.

The structure of this model illustrated by Moreno in a 2021 article has four basic components: density, proximity, diversity and digitisation. Moreno cites the work of Nikos Salingaros, who theorises the existence of an optimal housing density for urban development, which would encourage local solutions to local problems. The authors discuss the concept of proximity in terms of both space and time, arguing that a 15-minute city would reduce the space and time needed to carry out daily activities. Diversity, in this 15-minute city model, refers to mixed-use development

and multicultural neighbourhoods, which Moreno et al. argue would enhance the urban experience and increase community participation in the planning process. Digitalisation is a key aspect of the 15-minute city derived from smart cities. Moreno argues that the fourth industrial revolution has reduced the need for commuting due to access to

±15-MINUTE CITY





3.5 THE ESTRANGEMENT AMPLIFIED BY THE GHETTO

technologies such as virtual communication and online shopping. They conclude by stating that these four components, if implemented on a large scale, would form an accessible city with a high quality of life.

The memory of the ghetto is sad. An area destined for the confinement of the different, a symbol of racial, religious and cultural discrimination.

The closest phenomenon to this narrative is cer-

tainly the Jewish ghetto, but we should not forget how similar realities have developed overseas, demonstrating that it is not necessary for two situations to occur in close proximity to be similar. Recalling the United States of the 1970s, while hobo and hippie culture flourished, slavery was abolished and civil rights laws passed, discriminatory rules ghettoised African Americans. Confined to bad and decadent neighbourhoods, such as the South Bronx or Harlem, they continued to live in inhuman situations.

In Europe, these open-air places of confinement arose much earlier. Already in the Middle Ages,

Jewish neighbourhoods were identified as 'Giudecca', but the difference with the ghetto was glaring. The former were outlying residential areas that accommodated the Jewish population who voluntarily wished to reside within a safe oasis of cultural preservation and solidarity, while the latter were a place of compulsory forced settlement.

Discrimination in the ghetto was daily: those who resided within it were not allowed to buy land outside it (sometimes one was not allowed to become a landowner at all). The boundaries of the ghetto were then referred to as 'the fence', as if referring to a herd of cattle, whose many doors were closed



at nightfall and reopened at dawn.

The ghetto did not expand or improve as its population grew, as a normal neighbourhood should. A typical feature of these places was precisely the peculiarity of their dwellings: tall houses interspersed with narrow, dark streets, since the only way to cope with new births was to raise dwellings to create new space.



{3.5.1 FAVELAS: A MODERN GHETTO

In modern times, a monstrous example of secession and racism was staged by the followers of Hitler's ideology. After the Nazi invasion of Poland in 1939, the Jewish population of Warsaw was herded into what we now call the 'Warsaw Ghetto', a walled area of the city that, at its peak, housed over 460,000 people. They were kept in a constant state of hunger and terror untill when they would be sent to the nearby extermination camps of Treblinka and Chelmno.

Many of today's ghettoised realities no longer present the distancing from the city centre as the above-mentioned situations do.

Almost paradoxical realities of inequality are those of the Favelas of São Paulo. In 2004, Tuca Vieira, a Brazilian photographer and journalist, agreed to take some photos for the Folha di S.Paulo, a well-known local newspaper, in honour of the city's 400th 50th anniversary. The photograph, named Paraisópolis after the Favela depicted, soon became very well known and an undisputed symbol of disparity. A wall surrounds the property of a luxurious residence: a communal pool, a personal swimming pool on each terrace and two tennis courts symbolise the importance of a person. On the other side there is just poverty. This fence serves, as in the Jewish ghetto, to keep out all those people who are considered different, in this case because they are less well-off, poor and beggars. To put up a wall is to close one's eyes, to divide. There is no declination between rich, affluent, normal, working class, and poor and below the poverty population. There is a clear line between those who have too much and those who have nothing, a line that could vanish if the distribution of goods were fair.

What is the identity of this city? Those who live in the Favelas have to work constantly to be able to afford to live, they cannot invest time in study and training, they cannot improve their status, they cannot obtain the political and economic knowledge to be able to transform their reality. Those who live in the residence do not feel solidarity for their neighbours, there is no civic responsibility to break this circle of injustice brutally inherited from the slave period.

Vieira recounted how he tried to make the photo as flat as possible. He decided to exclude the horizon from the shot, a choice that created quite a few doubts among the public, in fact many claimed it was a collage. It is not strange that this popular reaction occurred because, as the shot soon achieved worldwide fame, for those who had never interfaced with such situations of inequality and poverty, the representation appeared absurd.

"If images provoke uncomfortable feelings of fear, despair or an unsettling realisation of complicity, well, they are bound to do so". So says Johnny Miller, an American photographer and journalist, whose project Unequal Scenes uses drone photography to reveal spatial inequalities hidden 'in plain sight'.

The similarity between the two photographers' work is evident, as they met in 2020 and decided to return to Paraisópolis to shoot an updated image. Not surprisingly, the gap was still there, Famous photograph of Paraisópolis, a Favela in São Paulo, taken by Tuca Vieira in 2004

Recreation of the same photograph, this time taken by Johnny Miller a full sixteen years after the original, in 2020



ອີ້ອີງ/stefania aili

and the eerie-looking, somewhat derelict luxury apartment block still looms over the squat brick houses below. The change from 2004 in the built environment is radical. The favela houses have been replaced or completely altered. The street is obscured by new developments, the trees are now fully grown and even the wall seems less imposing. The curtain of separation this time is amplified by dense vegetation. The two photos, sixteen years apart, are recognisable as sisters, but also profoundly different.

{3.6 DOES DESIGN GHETTOISE?

40

A simple choice can exclud an entire section of the population. Hence the term 'ghettoisation', still used today to delineate certain decisions that favour one user over another, marginalising them.

In an inclusive design perspective, where the designer's aim is to achieve accessibility, this phenomenon must not exist. Does making products specifically for a certain category of people with specific disabilities really achieve inclusiveness? If the good or service at issue points the finger at those with Alzheimer's and can only be used by them, then it is proceeding to the ghettoisation of this pathology. Inclusion means acceptance and willingness to extend a right, an opportunity, or the participation in an activity or system to as many people as possible.

The opposite of ghettoisation in the project sphere could be a kind of 'Swiss army knife syndrome' where one tries to provide as many possibilities ים to the u נו יא פי לstefania aili to the users so that everyone finds the one that

suits them best. The project should be one and the same, but present different facets and stimuli aimed at satisfying more than one need at a time.

Therefore, the differences between metropolitan individuals should not exclude or alienate each other, but rather enrich and acculturate.

3.7 URBAN IDENTITY

The management of city spaces and how people connect to them can create and stabilise a sense of place, which thus becomes an identity asset. In this sense, there is a profound link between urban regeneration, spaces, social relations, territorial identity and place belonging. Regeneration means not only reorganising spaces by making them more usable and attractive, but reactivating and reworking one the "belonging feeling" that a given space carries and that, as established and shared by a community, it represents an identity resource.

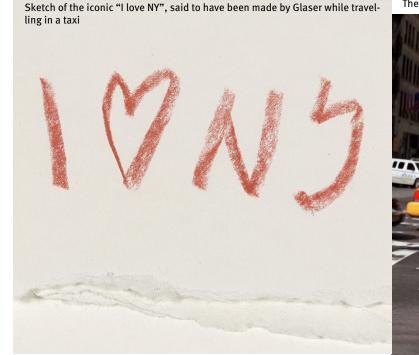
Therefore, a higher place belonging can be expected when urban regeneration interventions are able to create meaningful experiences for people and activate, incorporate and promote the symbolic and relational values and identity of the local context in which they are established. Otherwise, such interventions may suffer from a lack of sense of place (or placelessness according to Relph, 1976), thus reducing the likelihood of generating positive outcomes.

3.7.1 *THE CASE "I LOVE NY"*

One project that combines the question of identity with the one of urban regeneration is the iconic 'I love NY' logo. An image symbolising redemption, that was needed to requalify the name of the Big Apple.

In 1973, New York was overwhelmed by a severe oil crisis, the risk of bankruptcy was great and crimes were rampant.

In 1977, Milton Glaser, a New York artist and designer with Jewish roots, proposed "I love NY" precisely to revive the city's image and promote tourism, at the time perceived as dangerous and



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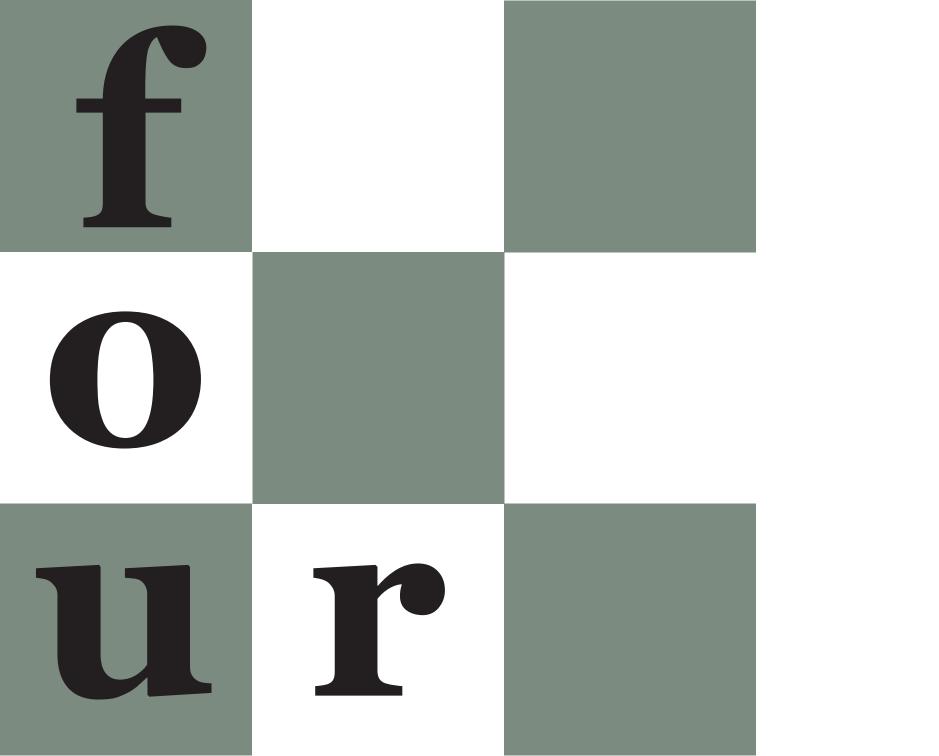
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run-down. It was a shrewd territorial marketing move that still reaps rewards today all over the world. It is not simply a brand or a fad, but a true symbol of urban identity, unity and freedom. 'I love NY' plays a landmark role. "I knew that what we were communicating was something that held people together, that established for them a way of communicating, which in many contexts is not so easy to find," Glaser declared after some time.

Following the attack on the Twin Towers on 11 September 2001, many citizens wore the famous logo, now an undisputed symbol of New York. Shortly afterwards, Glaser re-branded the logo as "I love NY more then ever" with a small black spot over the heart. The initiative was a clear message to the population, not only of New York, but of the entire United States and the terrified world.

The cover of the Daily News on 19 September 2001





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{4.1 TO SUM UP

From the contextual research just concluded, it is evence that the city is not just man's artificial habitat, built, in theory, to perfectly suit his needs, which change over time. The city is not yet the ideal environment for man, which is why it is constantly evolving, which can be massive, as in the case of the industrial revolution, or globalisation and lead to rapid changes in a short time. Man is not the only inhabitant of the city, there are numerous residents in the sky and on the ground who need to be protected and safeguarded. In fact, the users treated will be the children and parents of the future, as well as the city's birdlife, increasingly subject to barbarism by man who wants to be the absolute master of the Earth.

Here we find the needs of human users, resulting from the contextual research phase.

{ INCLUSIVE }

Both structurally and interactive. I.e. access must be usable by anyone who needs it, despite possible motor or cognitive disabilities

{ PARTECIPATORY }

It is necessary to create a public meeting point and point of interest between cultures, in order to create unity and knowledge among the population, so as to fight the indifference caused by the city habitat

{ EDUCATIONAL }

It must be useful to develop knowledge and curiosity. It has to allow the user to acquire important skills and notions, as well as awareness of the area in which one lives

$\{4.2^{USER}_{NEEDS}\}$

{ ON HAND }

Using the concept of 'The 15-Minute City' as a model, it is necessary to make the product available quickly, everywhere in the city

{ ECO-FRIENDLY }

The product should be made to protect and help nature regain its place in the city. This can be made by reintegrating biodiversity and avoiding adding CO₂ emissions to the already widespread city smog

{ IDENTITARIAN }

It is important to stimulate the feeling of urban identity, to increase the sense of place belonging and the interest in caring for the city's land by appreciating public areas as one's own and not as nobody's

{ SENTIMENTAL }

Through remembrance it must generate affection and engagement, so as to encourage a frequent use of the object and make it indispensable in the everyday life

{ TEAM BUILDING }

It must encourage teamwork, organisation and coexistence. It aims to create new relationships, friendships and interactions among the people in the neighbourhood







{4.4 TO WHOM IS IT ADDRESSED?

It is necessary to speak to more than one user. This is because the aim of the project is to create communication between the inhabitants of the same habitat. The city is populated by many animal and plant species, such as birds, pets, insects, amphibians, etc. In this list of city residents, one should not forget human beings, the colonisers of the habitat and main exploiters of its resources. Create a link between them is fundamental in order to break down the indifference created by a hectic life with everything at hand and to promote urban biodiversity, both faunistic and cultural.

The project will focus on both humans and animals, avifauna in particular. The birds that inhabit city skies are inevitably living in contact with men, for better or for worse. It happens that they nest in the artificial constructions created by men, in fact many prefer to build their nests under roof tiles, in the holes present on the facades, on the roofs of skyscrapers or in bridge holes. Each bird chooses for itself and its future chicks the best place to build a solid shelter. It does not matter whether it is a natural place like a tree trunk or an artificial one, the important thing is to have an ideal temperature, plenty of natural light and the possibility of finding food.

Speaking, instead, to future generations is propaedeutic for a change of mentality as an outcome. Through familiarity with new habits, a new routine will be created that will have the task of consolidating certain behaviours among children, which will then be intrinsic in the adults of tomorrow.



In a changing and increasingly connected world, travelling will become an integral part of most people's lives.

In particular, the migration of people to large megacities, places that symbolise technological innovation and speed, but also the loss of authenticity in a process of global over-conforming. This confrontation with anonymous realities other than one's own, in which it is technology that runs the individual's life, leads to a sense of disorientation, often accompanied by feelings of isolation, rejection, irrational fears, irritability, temporary loss of a sense of identity, anxiety, confusion and anger. In addition to this, re-entry shock of re-entry shock: returning to one's country of origin and not finding things once familiar, especially in a world that is evolving faster and faster.







WHO IS THE GLOBALIZZATO TECNOFLESSO?

I tried to investigate to whom the globalizzato tecnoflesso in today's world corresponded. I wanted to find him so I could ask him questions and better understand his point of view. At first I thought he was a millnnial. Today's 30-somethings were the first ones to log onto a social network, for whom life always went faster because their instagram or facebook feed was constantly being updated. The first to know the news or follow trends. They are the ones who saw the birth of the Internet, who used the first computers, but also the ones who are experiencing all the consequences of the ongoing recession.

I realised, however, that the generation between 1980 and 1995, started this journey, but is not as much at the mercy of it as gen Z. The millennial still prefers to live offline, although they recognise the great power and usefulness of google and a message on whatsapp.

50

They were born when Mc Donald's had already landed in Italy, in 1985, and do not remember the previous Burghy, a Milanese chain active in the same sector from 1981 to 1996 and subsequently bought by the 'original'. They are children of globalisation, they suffer its repercussions, but they are not globalizzati tecnoflessi.

Those who are afraid for their future, feel helpless and at the mercy of a rotten world now bequeathed to them are Gen Z. Those born between 1996 and 2010 have been catpulted into a digital reality, where everyone has their own account, but few preserve their identity without pandering to trends.

The world of generation Z is a world of appearances where the important thing is to put on a good face on social networks. Traveling an integral part of their daily life and is their highest aspiration. Traveling is one of the first ways generation Z spends their money, in fact they tend, rather than saving, to use their savings to collect experien-

People queue outside a Burghy restaurant, 1985. Author unknown



ces.As soon as you see on Instagram that someone is traveling you find yourself in envy and desire to do the same. Outside of the screen generation Z lives an isolated life where they prefer and have a few times with a few friends but good ones, probably this is also a legacy of the COVID period and which was suffered by them from far too young. Feelings of envy, isolation, and failure are the order of the day. The latter probably originates from the feeling of helplessness toward the fate of the world and the idea that the vast majority of the population is not interested in protecting the environment as they are older and therefore closer not to inhabit it anymore. The rhetoric of "none of my business "weighs heavily on Generation Z who, although they prefer to spend their time with a few friends but good ones, have a strong sense of community, probably generated by the constant connection of people worldwide. This concern about climate change brings anxiety, or rather echo anxiety, confusion anger and listlessness.It is not +1 priority to have children, as it was for all previous generations.

Seventy percent of millennials wish to become parents while 50 percent of Generation Z see children as an impediment, too great a responsibility as they do not feel able and to care for another living being, they therefore feel incompetent. Beyond that, Generation Z thinks there is no benefit in having a child as there is no telling how much longer the human race will live on the planet.A child is seen as an economic drain and given the precarious state of the economy globally few have the desire or opportunity to invest in a child.

The globalized technoflex is clearly a gen z exponent. so I decided to subject several exponents of

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both millennials and Genz to a series of questions to try to identify their specific views on some of the issues I care about for this project.

I then highlighted the common characteristics and created two summing characters, so as to get a good understanding of the differences between these generations so close, yet so far apart.

{4.5.1 Getting to know A MILLENNIAL

Daniela is a 38-year-old woman living in London with her family. Her and her husband are both italian abd, when they met in the UK, they just thought it was better to start their life as a couple there. She was born in a little town in Brianza and now works as a receptionist in a grand hotel.

GENERAL INFO:

1. Where do you live? And how long have you lived there? What made you choose to start your family right where you are now?

London. Been living there since 2004. Me and my now husband met in London and with our lives already started there, it just made sense to settle there.

2. What does your family look like?

Mum, dad, a 5 year old daughter. And a cat.

3. What is your typical day? It is interesting to understand the ordinary daily routine of the whole family.

I leave home *zish* am to go to work. Emily wakes up 8ish to go to school (year1). Dad gets her ready and does the drop off, school gates close at 9am.

He would go to work towards midday. Emily would finish school at 3.15pm and will go to after school club. I finish work at 5pm and do the pick up around 5.45pm

Early dinner between 6.30pm and 7pm, some TV and her app school games (phonics and maths) She would be in bed around 8pm reading her own book reading and then actual story times. She is exhausted especially by mid week.

THE NATURE:

4. On your commute to school or to work, how often do you come in contact with a natural element? Is it a hectic commute or or do you make

a few stops, for example, to rest in the park and have a snack? Is it difficult to incorporate nature in your lifestyle?

Not really any time to incorporate that. I would walk to the next train station (about 20 mins) to catch a direct train close to where I work so I don't have to rely on a connection.

Emily's school is 5mins from home.

le time to rest!

When the weather is good or during spring and summer/early autumn I would take her to the local park and playground at 6pm when I collect her.

5. What do you appreciate most and least about living in a big city?

Most: the amount of activities and opportunities we can access Least: everything goes fast, often too fast with litt-

6. What kind of access to nature does your home present? For what reason did you choose it?

We have a quite spacious garden, trees all around that makes the space rather private. We have a local park with playaround and a mini forest about 15 mins walk. Main parks like Crystal Palace and Brockwell Park are only 15 mins bus

7. On a daily basis, how much time do you spend into the nature? During a particularly busy and hectic day, spending time outdoors, in contact with nature, takes a back seat?

During spring/ summer and early autumn if the weather is nice we would go 6pm to 7pm on weekdays, we do either Sat or Sun out in a park /outdoor activity. tes to jugale!

8. How much quality time are you able to dedicate to your child? How much of this time is spent outdoors? What do you do together?

9. How are you experiencing climate change? Have you adopted new habits, perhaps are you more aware than before on this topic? Or are you trying not to think too much about it?

52

On winter we would not go out on weekdays but when the weather is nice we would go out on weekend late morning/ early afternoon for walks as long as no rain. It all depends also on diaries and activities, lots of kids playdates and birthday invi-

Weekdays we would do dinner together and we always have the bed time not only for stories but to share whatever Emily feels to share.

Saturday it is me and Emily as Alberto works so we always try to do something, but it can vary with good weather we like doing picnics and park trips. Sunday we are all home so it is often nice to have what Emily calls home days with nothing planned to recharge. She would go out in the garden to play or maybe have some time out with the scooter, but would not necessarily force her especially if we've been out the day before.

THE CLIMATE CHANGE:

We can definitely see spikes in seasons and weather. We discuss it with Emily especially since nurserv this is a topic she is well aware of and habits *like recycling, switch off the lights, the water etc* are a norm. We will continue raise the awareness

to this issue as she grows, I think habit plays a lot into this topic.

10. How has climate change affected your mental health and the one of those around you? No

I'm worried about how the whole situation could turn for the worse, especially because I see many people who just don't think about it or don't care about it because they think it's a problem only for future generations (as if it wasn't their problem!). I can't imagine how they can think that way...). Instead, it makes me very anxious to see that we are already seeing the effects of climate change and of course I worry about my children. I hope that more and more people will become aware of this topic and that everyone will work to make a difference (ideal world?).

11. Do you ever think about your child's future in relation to this "new world"? Are you worried or afraid for them?

You do worry about what is going to be left to them, especially when you hear people still denying the issue or refusing to do basic changes. But to be honest there are plenty of issues that can be worrving in seeing a voung girl growing, so all vou can do is teach them right from wrong starting from a young age but too many things are beyond control.

12. Many young people have stated that they do not want to have children precisely because of what seems to be an irreversible climate change, what do you reckon? Is this a situation that you experience closely? For example, do any of your

friends feel this way? Or, have you ever felt the same way?

Not really, in our circle the main concerns are: money, childcare vs work costs and time management, accessible house crisis and last but not least, youth extreme behaviours (stabbing, extreme violence, early age exposure to sex and sex themes, social media influence on their growing to name only few)

THE CITY COMMUNITY:

13. Living in the city, sometimes you don't even get to know your neighbors. What is the relationship with your own? Do you know and talk to your neighbors? Can you rely on them?

When we were living in a tower block of flats, we would only know our next door neighbours as we politely introduced ourselves but that was it. Now we know our building neighbours (we are 4 flats) and also the next door neighbours. We are quite close to our above neighbours as they are similar age, we often catch up and also we rely on each other to collect parcels, feed our cats when away, water the plants etc and I would not have an issue on leaving Emily with them in case of emergency.

14. Living in a big city, do you feel part of a community? Or do you often experience situations of indifference among people?

Yes it is quite common but that is also the beauty of the city where you get to be who you are and nobody judges you for that. We now live in zone 3, still pretty central for London but our neighbourhood has more a village feeling, more independent shops, people know each other, there are regular community events, library, cinema and park are the places to go! Especially once you have a child you will start attending these places more regularly and you will get to know the people and feel at home

15. How do you get to know your friends? Is it difficult to approach new people in the city environment?

Most of friends come from school, work or now from kids playdates. I am no longer interested in having a long list of friends, when you are away from home you just want to surround with people that understand the feeling of being away from home with no family around and you create a circle of trusted people that really support each other and become your extended family

16. Have you always lived in the city? If not, which are the main differences you notice between city and country life in the two main topics we are discussing: nature and community? In your opinion, which is an easier context where to develop healthy and strong human relationships?

No I have lived in city since 2004.

Cities are full of opportunities vet you can be surrounded by people and still feel lonely. But when you find the right circle of friends, the bond and the experience you share is unbreakable (I am talking about being in a foreign city as an expat, not sure about moving to a different city in the *same country*)

Country life is more free, I don't think I could trust Emily in the city to have the same independence I had growing up. The risks in cities are often

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areater, but I also feel the exposure to different cultures, activities and the opportunities are also greater and that offsets the risks. But the lifestyle is really frenetic at times so sometime you wonder until when you can keep it up!

{4.5.2 Getting to know A GEN Z

Federico is a 23-year-old italian boy studving in Delft, the Netherlands. He was born and raised in the Milanese suburbs and misses the city a lot. He dosen't want to settle down because he hasn't found his place yet

GENERAL INFO:

1. Where do you live? And how long have you lived there and why? Where do you see yourself living in the future?

I live in Delft, a small town in the Netherlands because I study there for my master's degree. In the future I will definitely not live in the Netherlands because I don't like the climate here and I have had a lot of difficulty making friends. I see myself living in a big city, I was born in Milan and I miss living like that. I don't think I will go back to Italy because I would also like to try living in a megalopolis to see what it is like.

2. Who do you live with?

I live with a roommate. I just moved in. He is Dutch and so far I don't know him very well.

3. What is your typical day? It's interesting to understand the daily routine, the emotions you feel, what you like and don't like to do.

So my typical day varies depending on the period. Like right now I'm not doing much because I finished my exams in college and I'm waiting for the internship to start under Christmas. But generally I try to get out of the house, take my bike and go to the gym. I come home, and I study a little bit, do some chores, and then sometimes in the evening I go out. If I go to the university take everything I just told you and do it in a hurry. I still manage to stick to my routine, the only thing that stops me is the weather because I can only move by bike.

4. Do you lead a hectic life? Have you ever felt

powerless, overstimulated or even in work burnout?

Of course, living alone abroad can be very nice, but it can also be very stressful. Even though you have a few friends when you need help many times vou are left alone. My life is rushed precisely because I have to think of everything myself and when others also put stto pressure on you I think it is normal to feel overwhelmed, at least, it has become normal now not to disconnect well private and work life.

THE NATURE:

5. On your commute to school, or home to work, how often do you come in contact with a natural element? Is it a hectic commute or do you make a few stops, for example, to rest in the park and have a snack?

No, my commute is absolutely a straight line. I have no time, no desire, to stop anywhere, I think it's almost a waste of time. I take my bike and ride the bike path along the canals, already this is an activity that puts me in touch with nature, the only one there really is. There are not many parks here, although it is a small town.

6. What do you appreciate most and least about living in a city during your daily routine?

When I lived in Milan, I really appreciated being able to get out of the house and go play basketball with friends, minimum effort and maximum yield. When I have to take multiple means to go somewhere my enthusiasm goes away. It's very convenient that any delivery you want can come to your house, in short, having everything available when you want it. Here it's not exactly like that precisely because it's a smaller city, and I suffer a lot from that, I feel very socially isolated.

7. What kind of access to nature does your home present? For what reason did you choose it?

8. On a daily basis, how much time do you spend in nature? During a particularly busy and hectic day does spending time outdoors, in contact with nature, take a back seat?

in nature.

THE CLIMATE CHANGE:

9. How are you experiencing climate change. Have you adopted new habits, perhaps more aware than before, or are you trying not to think about it?

The habits are the usual ones, I think I've been careful not to waste water or use the air conditioner too much since I was born. Otherwise I use my bike every day instead of transportation. In general I try not to think about it because I get too anxious thinking about the future and the predictions of

56

From the kitchen of my house in Delft there is direct access to a small patio that overlooks the street. I don't think this is the right answer, but I don't have a garden or balcony, for example. I must say that the city is quite green, but there are no real parks to stand in.

Not a lot of time. I try to get out and take breaks in the sun, aet some vitamin C and disconnect from the hubbub, but it's not always possible. Other than that, I don't systematically try to spend time

our planet.

10. How has climate change affected your sanity and the sanity of those around you? Do you ever think about your future in relation to this "new world"? Are you worried or afraid?

Of course I am worried, but in order not to live in a constant feeling of hopelessness I try not to think about it. When the subject is brought up by someone it automatically puts me in a bad mood. I have friends who feel the same way, in general I notice a lot of awareness and fear in my peers, something that perhaps those who are more adult than us lack.

11. Many young people have stated that they do not want to have children precisely because of what seems to be irreversible climate change, what do you think? Is this a situation that you experience closely? For example, do any of your friends feel this way? Or, have you ever felt the same way?

I understand them and partly agree. Why have children if the world could end at any moment? It seems to me a selfish and poorly thought-out choice. Then children are a responsibility, and I don't know if I will ever be ready to take care of someone else like that. I think it's very smart what *my parents did. They spent a lot of time traveling* the world, the best money spent in my opinion, and then they felt the need to have a child. I think if I ever have one I will do just that, I would feel like my best years are being stolen from me if I have a child in my thirties.

58

12. Are there any other reasons why you are re-ים 12. Are נוס יא ס לstefania aili

luctant to have children in the future?

Of course. I don't even know if I will ever be able to support myself or buy a house. Children cost money and are really too much work.

THE CITY COMMUNITY:

14. Often in the city you don't even know your neighbors on the landing. What is the relationship with your own? Do you know and talk to your neighbors?

I don't know them. I think I talked to them a couple of times because they had delivered a package of mine to them. I don't even plan to get to know them because then I would always feel obligated to listen to them when I leave the house.

15. Living in the city, do you feel part of a community? Or do you often experience situations of indifference among people?

I feel part of some groups rather than a community. I have my group of friends, when I lived in Brighton I had my korfball group, really a nice environment, here I have a group of friends from the university. It's not community, it's not a group related to the street where I live or my neighborhood, it's generated by passions in common, I think it's inevitable to meet people in that way. I think it also depends a lot on where you are, how long you live there and why.

16. How did you meet your friends? Is it difficult to approach new people in the city environment?

Yes, it is difficult. If you move you have to jump

into some extra activities if not, it's very difficult to meet people.

17. Have you always lived in the city? If not, what are the main differences you notice in the two main issues we are discussing: nature and community? Do you think it is easier to develop human relationships in city settings?

I have always lived i a metropolis or in a small town. In Milan, for example, there are a lot of parks and for my needs this is a very important thing, for me they are really a meeting point with *my friends*. *Absurdly*, *here in Delft there are none*, *vou have to pedal a lot before you find one. At the* level of human relations I wouldn't know because in Milan I was born there and I have my lifelong friends, while here I have less deep friendships, but I've been here less than two years.

18. Do you feel that you are homogenized, globalized, because you live in the city? Do you feel you have a strong identity despite that?

Yes. Little changes from living in Italy or abroad in my opinion. On the level of food, customs and traditions there is not much difference if you stay and live in the Western world. I feel sometimes crushed by this homogenization, almost as if I were a piece of a puzzle. I have my own identity for sure, but I feel very influenced by the outside world.

19. How does traveling make you feel? Is it an important part of your life?

It is absolutely my priority in life. I love to travel and as soon as I have some money I always do it. I long to see the whole world. As I said before, I

do not long to have children because I would see them as an impediment to traveling, moving when I want to. I would feel almost caged to put down

solid roots somewhere.

20.When you return to Italy, do you feel lost? Are you afraid in the future that you won't feel at home and won't recognize the places you used to?

It's more the opposite. I feel lost when I go back to the Netherlands. I think I will forever have the memory of Milan as my home and it will be a pleasure to return there every time.

{4.6 THE PARENTS OF 2033

Brussels, 25 October 2023 - The new Headway 2023 report found that eco-anxiety, characterised by a pervasive fear of climate change and its consequences, is likely to affect mental health, particularly among young people. In general, in terms of prevalence of mental disorders, Italy is above the European average, with more than 1 in 5 citizens suffering from at least one mental disorder. Among the most common mental disorders are anxiety depression. and However, only 1 in 3 people suffering from these disorders receive adequate medical treatment.

For the first time since the initiative was launched in 2017, the 'Headway - Mental Health Index 3.0' report specifically examined echo-anxiety as a new key factor.

The report shows that, on average, more than a third of Europeans (37%) feel exposed to climate change threats. In countries where its effects are already tangible due to extreme weather events, such as Italy, Spain and Greece - which are part of the so-called Mediterranean hotspot, one of the fastest warming regions of the planet - the impact on mental health could be even greater. In Italy, 43% of the population feels threatened by climate change, due to rising sea levels and forest fires. In addition to ecoanxiety, the report highlights a number of parallel crises impacting people 's mental health. Geopolitical conflicts, social tensions and the cost of living crisis have affected the daily lives of millions of Europeans, with 62% of them claiming to be affected by the current polycrisis. These emerging syndromes resulting from climate change are called psychoterratic syndromes, an expression coined by Glenn Albrecht to identify the connection between the state of the earth (land) and mental health (psyche).

60



{4.8 Among the many Milanese birds: The redstart

Avifauna is a fundamental resource of the urban environment. It is important to conserve it and to encourage the nesting of species, especially those most at risk of extinction. One wonders how birds live in the city and the easiest answer is that they live in constant conflict with man. Let us look at one of the species that often nests in the city: the redstart.

The Common Redstart is part of the Passeriformes order and the Turdidae family. It is indeed a very shy species, which however prefers open or semi-open environments, such as cultivated fields surrounded by hedges and copses or heaths with sparse vegetation. It has a particular preference for the urban environment in general: in fact, it is frequently encountered within actual built-up areas.

The species' range includes the whole Europe, extending northwards beyond Norway and northern Asia and southwards as far as north-west Africa, from Morocco to Algeria. During the wintering period, the Common Redstart moves south of the Sahara, in an area extending from the Atlantic Ocean to the Red Sea, and as far south as the Great Lakes region in central Africa. In Italy, the species is concentrated in the central and northern regions, particularly in Lombardy, Veneto, Tuscany and Emilia-Romagna. In the southern regions, the population is much smaller: in Sicily, where the number of individuals was already rather limited in the early 1980s, the species has disappeared.

The Common Redstart is 13-15 centimetres long,

weighs no more than 15 grams and it has a wingspan of 20 to 26 centimetres. As its name suggests, the distinguishing feature is the rust-coloured tail, which is in constant movement even when resting. The male has a black colouring on the back, throat and lower part of the head, while the wings are greyish-black. A white band stands out on the forehead, which gets wider as the years go by. The legs and beak are black, while the breast, flanks and rump tend towards tawny. The female has plumage that takes on a brown hue at the top, while the breast is a shaded rust colour, as is the tail. Younger individuals also have a tawny tail and rump, while the rest of the plumage is speckled with whitish dots.

The Common Redstart is a monogamous species. The breeding season generally coincides with the month of May. It is the female that is entirely responsible for preparing the nest, which is built in tree cavities or, in urban centres, in cracks and holes in walls. The nest is made of dry grasses, roots, moss and feathers and takes the shape of a cup. The female lays five to seven bluish-coloured eggs, which she hatches for about 15 days. When the chicks are hatched, they are fed by both parents with insects, spiders, worms and snails. Sometimes, at the end of the summer, the female manages to complete a second brood.

On a continental level, the Common Redstart is not particularly in difficulty as far as reproductive success is concerned, although in our country the figures are slightly lower than the European average. In Italy, on an average brood, 2.8 chicks per nest survive in the province of Parma and 2.5 young in the Brescia Alps. Considering that 5-7 eggs are laid per year per pair, the probability



of hatching in Italy is 40%. Abroad, the hatching rate in Finland is 81.2%, while that in Finland is 92.3%. An average of 4.7 young fledged per nest.

Common redstarts are not an endangered species, but they do cause some concern, however, especially due to frequent deforestation, hence the inability to nest in tree trunks, a phenomenon that has led them to adopt a more urban lifestyle. Another factor threatening their conservation is the presence of numerous predators, such as foxes and cats.

It arrives in the city of Milan in April to leave, after nesting in natural cavities or buildings, for African wintering areas between September and October.

$\{4.8.1$ the tenants with wings

Niche-nesting birds (such as the Common Redstart, the White Wagtail and the Flycatcher) find a rich supply of settlement sites in the city and have few needs other than to remain protected from predators, such as cats and birds of prey. Old buildings full of overhangs, niches and protected corners with open beams are their favourite places. Public authorities and private citizens can protect these presences by installing artificial nests on buildings, viaducts and pylons. On the other hand, to manage the proliferation of pigeons, a pest species to all intents and purposes, cavities must be selectively restricted: access for pigeons is prevented, but the site remains available for smaller species.

Environmentally friendly construction considers

the needs of fauna at the different stages: design, construction, maintenance, in line with the demands of the European Biodiversity Strategy for green infrastructure and nature-based solutions. The topic is topical in light of the tax bonuses available for renovations and facade refurbishments. In order to protect the nests of swallows, swallows and swifts by carrying out works and renovations outside the nesting period, since 1999 LIPU has been proposing to municipalities the adoption of the 'Swallow Saver Resolution'. So far it has been adopted by 152 administrations (including Rome, Lodi, Verona, Florence and Matera), and recently the measures to protect and manage of urban biodiversity have also been included in some building regulations and animal protection regulations.

As emerged from the discussion with the ornithologist and naturalist specialising in urban avifauna Milo Manica, renovations to building façades are, many times, detrimental to the annual nesting of species. Repairing holes eliminates a possible nesting place. Many bird species are habitual, ergo they tend to return to the same nest built the year before and, many times, following a long migration, if they do not find the old nest, they do not have the strength to build a new one. Therefore, the removal of nests leads to a decrease in numbers year after year.

Responsible renovation or replacement is the first step to ensure the maintenance or reintroduction of urban biodiversity. in the case of birdlife, it is important to enhance buildings as habitats for 'welcome' species (swallows, birds of prey, sparrows, bats, etc.); avoid 'unintentional traps' (glass windows, transparent soundproofing pa-

nels, overhead cables, power lines, roads), by taking prevention and mitigation measures. it is then necessary to reduce disturbance factors, such as noise and pollution caused by artificial lighting, and schedule works during periods of lower impact, i.e. outside the spring nesting period for birds, or the wintering period for bats. Conscious planning is also helpful in limiting the establishment of 'problem' species such as pigeons and herring gulls.

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touch point between man and nature



α.

BELLUNO: ${5.1}$ THE CITY OF **SWALLOWS**

Belluno permanently gains the epithet of 'City of Swallows'. In 2022, the municipality and the province have established a great synergy in order to protect and enhance swallows, swifts, and house martins' nests in the historic centre of the city. The project has originated from the collaboration between the Belluno Dolomites National Park and the city itself, supported by Ascom Confcommercio. All the institutions have printed their logos on the anti-guano mats that were installed under the inhabited nests. The operation also saw the active collaboration of the Provincial Police, some volunteer naturalists and the Belluno Alpine Hunting Reserve, which was really needed for the census of the nests. A very positive trend was registered in recent years in terms of presences and broods. "It is pleasing to see this positive trend, both because the presence of swallows cheers up citizens and tourists, and because it is an indication of the good quality of the environment in which we live," commented Belluno municipal councillor for the environment Lorenza De Kunovich. "Also not to be underestimated is the fact that these birds also contribute to the quality of our environment. "Not to be underestimated, then, is the fact that these birds also help to contain the presence of mosquitoes, which in some cases have become vectors of

"The 'Belluno City of Swallows' project is a great team effort between organisations, associations and volunteers working together to safeguard the city's biodiversity. In fact, the provincial capital is one of the few remaining centres in Italy where swallows, swifts and house martins nest permanently," commented the president of the province, Roberto Padrin. "Being able to enhance this aspect also has a strong tourist promotion value and certifies the quality of the air and environment in which we live".

summer.

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important diseases, for some years now, even in the mountains where Belluno is located. It is the objective of this administration to act together with the other parties involved in the project to ensure that this positive trend is maintained".

Over the past few days, the monitoring of the nests, which has now become standard practice within the project, has been carried out. Volunteers Silvana De Col (wife of Bepi Tormen, the naturalist who began the practice of nest censuses years ago) and Mauro Varaschin, together with provincial guard Luca Catello, collected data on nesting sites. In total, they found 183 nests, up from the 168 censused in May 2022, of which 40 were used (against 38 a year ago). There are 24 nests with established reproduction, compared to just 19 a year ago. The data therefore show a healthy and growing population.

The next census is scheduled by mid-July and will focus on swifts, which tend to concentrate their brooding period more towards the beginning of

b.

{5.2 GIO&GIULIA: THE MILANESE PEREGRINE FALCONS

On top of the icon Pirellone there's a penthouse with a breathtaking view 125 metres above the ground. This is the love nest of Giò&Giulia, a couple of 'urban' peregrine falcons that pair together every year. Between the end of February and the beginning of March they usually return to the top of the Pirelli Skyscraper of Milan, seat of the Regional Council, for reproduction.

The presence of peregrine falcons in urban environments is already well known to the naturalists and it is totally ordinary with the laws of nature. They have a cosmopolitan distribution, and can therefore inhabit the most varied habitats, from the Arctic tundra to the Australian desert.

The Pirellone is the perfect spot for Giò&Giulia. It is a prominent spot in relation to a series of surrounding squares and is a dormitory area for starlings and pigeons. The forerunner was probably a young peregrine that found an available food source in the area and close to a potential nest. In addition, the night lighting of the streets makes it possible to observe the flight of migratory birds over the city and makes them an easy prey for peregrine falcons. The names of the two birds were chosen as a tribute to Giò Ponti, the master architect who designed the Pirelli Skyscraper, and his wife Giulia Vimercati.

Giò&Giulia were first spotted on the top of the Pirellone during april 2014. A few years after the first sighting, precisely in spring 2017, an artificial nest was provided for them: a wooden tank with a bed of pebbles at the base suitable for the hawks' brooding. Two webcams were installed looking at the nest aiming to allow people to follow the 24/7 live streaming showing the falcons family life at high altitude.

Giò&Giulia are now celebrities. Ever since the first brood observed live they have been virtually adopted by many citizens who follow all the stages of reproduction yearly: from the courtship dance to the laying of the eggs, from the birth of the pullets to their first flight.

Daily and accurate updates on the peregrine falcon couple and their pullets are reported to the population via the facebook page "Giò&Giulia Falchi Pellegrini a Milano". The chicks are all ringed and monitored three weeks after birth, so that their growth can be followed and their movements studied.

> Have a look at Giò&Giulia's live webcam





GUARDA-MI: A DATABASE BY **CITIZENS FOR CITIZENS**

The Liceo Artistico di Brera, the Museum of Natural History in Milan and the associations Ornitho e Terzo Paesaggio have created the GuardaMI project.

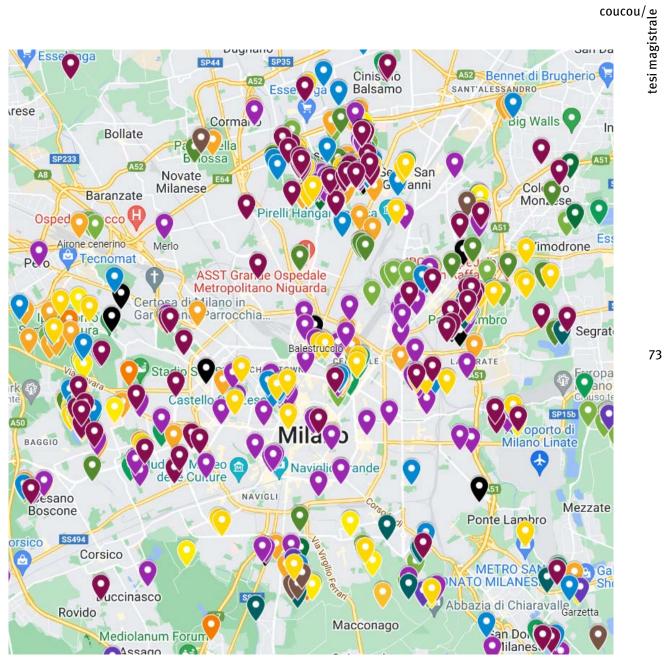
It is a citizen science project on the study of Milan's urban ecosystem with the aim of "bringing students and citizens closer to the environment and nature conservation starting from where they live: the city", explains Marina Nova, initiator of the project and science teacher at the Liceo artistico di Brera. Professor Nova has long been involved in ornithology and urban avifauna, and her commitment to the creation of GuardaMI has allowed the activity to be suitable for alternanza scuola-lavoro, encouraging students to take an increasingly active part in it. Indeed, teenagers are learning about the meaning of biodiversity on a broader level, while also analyse the specimens in the museum and then bring this knowledge back to the urban environment where they live. The aim is to teach the concept of nature conservation, starting with the one of biodiversity and its perks.

The GuardaMI website features the georeferencing of sightings of the species that populate Mi-

lan and its suburbs. The data are derived from the sightings of many citizens and students who help in the discovery daily. These include not only avifauna, but also mammals, reptiles, amphibians, butterflies and dragonflies.

The GuardaMI app is the tool created by academics to guide citizens and students to discover urban biodiversity. It is easy to use; once downloaded onto your mobile phone, it allows you to record your observations of the animals you encounter in the city. If you are a neophyte and therefore inexperienced, you take a photo of the subject and a guide based on the colours of birds and butterflies will allow you to identify them. The application also offers information on exotic species that have colonised the city habitat and their needs. Lastly, there is an SOS Fauna section for those who find an injured or distressed animal, it will retrieve the directions and telephone numbers of assistance centres in the area. Each observation sent is checked, corrected if necessary, and the citizen scientist will receive a thank you email with any corrections.

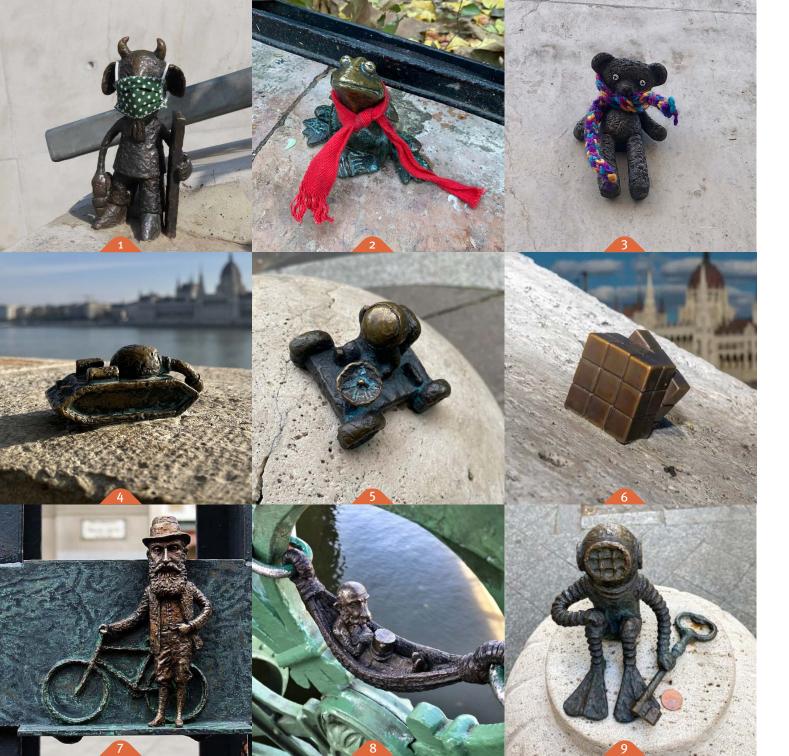
The photo and geolocation are the necessary data for the urban database so everybody is encouraged to support the GuardaMI app. It will serve to census and map the species that share the city with us.



The map shows some of the most representative species of birds in the Metropolitan City of Milan







а.

MIHÁLY KOLODKO'S MINI-SCULPTURES IN BUDAPEST {6.1

Budapest is a mystical and multifaceted city, full of secrets that only its inhabitants know. However, once you come across the famous Mini-Sculptures by Mihály Kolodko, a Ruthenian sculptor known for his guerrilla-sculpture interventions, you feel part of the community.

They are really tiny bronze statues, therefore you really need to pay attention to your surrounding if you want to spot them. The sculptures are scattered around the city and many of them are not even marked on Google Maps precisely to entice people to take a walk outside in search of these little treasures. This is an excellent leisure alternative, and every time a new mini-statue is spotted, it sparks great interest and curiosity in the city.

It is common to see the Mini-Sculptures decorated for holidays or recurring events. They are now a huge part of the city and therefore citizens take care of them.

By the time the artist comes up with the idea about the subject of his next mini-sculpture, he also has already thought about the location where to install it. Statue and location belong together because they are meant to tell people the history of

The artist expressed his affection for cartoons, which helped him in learning the Magyar language. Thus, among the sculptures dedicated to this theme, Mekk Elek (1), the messy goat, protagonist of short films broadcast on television since the 1970s, could not be missing. Here you can spot it wearing its Covid-19 mask.

If you look at the plague under the arm of the sculpture, you can see that the careless character wrote Moszkva Square, the former name of what is now Széll Kálmán Square, where the statuette stands. This is just a reminder of Kolodko's modus operandi: every statue was born with its specific place to be.

There are also less traditional cartoon characters. such as Kermit the Frog from the Muppet Show (2) and, just recently, Mr. Bean's Teddy Bear (3), a clear reference to Brexit, was spotted. The sculpture was in fact placed on the building of the former British Embassy in Budapest. Both of them are now dressed up for the winter season since someone made the some scarves "to keep them warm".

What do the sculptures of a tank and a Lunar Rover have in common? A reference year, 1956. The miniature of the tank (4) was made on the occasion of the 6oth anniversary of the revolution, however the one we see today is a copy of the first one that was stolen.

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Hungary and to do so they have to create a great connection with their surrounding. Kolodko's concept was to commemorate cartoon characters and well-known personalities, always adding a special angle related to Hungarian history, tradition and contemporary art.

Following the revolution of '56, Hungarian engineer Ferenc Pavlics fled to the United States and created the wheels for the Lunar Rover (5) used by NASA during the Apollo 15 mission. This mini-sculpture is strategically placed on a rounded bollard made of some kind of white stone, which beautifully recreates the Moon and lunar surface.

A number of masterpieces are dedicated to hungarian pride such as the eponymous invention of the well-known Rubik's puzzle (7).

Also hungarian pride figures are featured, such as the Austro-Hungarian Jewish journalist, activist, politician and writer Tivadar Herzl (6), who became known as the father of modern Zionism. Today you'll find a tiny sculpture of Herzl with his bike (most likely inspired by a photo taken of Herzl with his bike in Austria) appropriately placed near the iconic Dohány Street Synagogue in the 7th district. On Dohány Street, not too far from his miniature likeness, you'll find his birth site, which is now the Jewish Museum. Since Kolodko is choosing the placement of its Mini-Sculptures so carefully he's also accompanying tourists touring Budapest, therefore, finding all the statues is a great way to stroll around the city.

In May 2021, the Austrian Emperor and former King of Hungary, Franz Joseph appeared on Liberty Bridge (8). The choice of location was significant, as the bridge used to bear the Habsburg ruler's name – in fact, he hammered in the last rivet to complete construction. As for the hammock – well, that refers to the folks who took over the bridge while it was closed to road traffic a few years back. Hammocks hung high from the bridge's cables as people took the chance to relax and chill in one of Budapest's most iconic spots. Legends about the city of Budapest are also the subject of Kolodko's narration. This is the case of the New York Café. When it opened in Budapest in 1894, its key was thrown into the Danube River so that the café would never be closed: the small bronze diver outside the building (9) is its symbolic guardian. In the picture you can see that the diver recieved a coin, another evidence of the importance of the Mini-Sculputers for the city of Budapest.

Finally, concerning contemporary art, Mihály Kolodko also makes reference to Cattelan's installation Bidibi bodibi boo, whose subject of the suicidal squirrel he has taken up: it is no coincidence that the mini-statue is located near the life-size statue of Peter Falk as as Lieutenant Columbo who, together with passers-by, is entrusted with the task of unravelling the mystery of the animal's death.

The Mini-Sculptures are therefore visible to an attentive observer, who is not just interested in visiting the city, but in taking a real tour of its beauty, oriented towards the details and secrets of the place. This Kolodko initiative allows people to get to know different faces of Hungary and conveys pride. A lot of information and reflections are communicated that otherwise would not be addressed by the normal tourist or citizen.





{6.2 THE SPACE INVADERS HUNT: A WORLDWIDE WALKING TOUR

D.

Space Invaders was born as an art project by Frank Slama, a French urban artist and writer who assumed the nickname 'Invader' thanks to his initiative.

The idea is to paste characters inspired by or forming part of the world of Space Invaders, the famous 1978 arcade game, on the walls of Parisian buildings. It was in the French capital that Slama began his 'invasion' in 1998. It is a peaceful conquest of the world achieved by the mosaic juxtaposition of small coloured tiles needed to replicate the game's harmless aliens.

In order to understand the origin of this project, it is necessary to know that Space Invaders is a fixed-screen arcade game classified as a 'shooter'; thus, its objective is to shoot the small aliens that materialise on the screen and collect as many points as possible. The video game was invented by the Japanese Tomohiro Nishikado and its publication heralded the beginning of an era of great fortune for this type of entertainment: the golden age of arcade video games. Space Invaders is thus the best known representation of its type, an icon for the entire video game genre, even for later generations, so much so that it is considered the first 'shooter' in history. When the Japanese production company Taito released Nishikado's idea, arcades had never seen anything like it. People used to go there to play pinball or table football, now they queue for kilometres and wait endlessly just to shoot at these Martians, as they are called in Italy.

One of the future pieces to be added to his accurate sequence will be suggested later by Slama, thanks to QR codes and mobile phones. The primitive arcade game graphics of the 1980s. which took advantage of the low resolution of the screen, i.e. its large pixels, made it very easy for Slama to develop the little aliens. The mosaic technique, already widespread in the Greco-Roman world, is based on the arrangement of fragments, usually square in shape, of individual tesserae placed neatly side by side, depending on the desired design. Right around 1982, not long after the publication of Space Invaders, Pixel Art became a technique recognised by the art world. It is a digital art technique created with the help of a computer and raster graphics programmes. It is generally compared to Pointillism, and while this association is not wrong, is there not a stronger resemblance to mosaic? We could say that Pixel art is nothing more than a digitised mosaic, each pixel representing a tile, but it would be wrong to claim otherwise given their distant years of birth. The choice of the mosaic thus seems to be the natural 3D transposition of the pixel, making an already iconic Martian immediately recognisable even without the presence of its 'shell', the screen and the arcade cabinet.

Space Invaders are conquering the world. After Paris, Slama operates in thirty-one other French



LATEST SUCCESSFUL "FLASHES" 349 032 Players / 21 987 847 Flashes



Paris LEACNTR 3 seconds ago



Paris BLANCAARCAS 21 seconds ago



Paris TREMPAULINETTE 7 seconds ago



Lyon MOM075010 24 seconds ago



Paris TIOUSS 13 seconds ago



London ANONYMOUS 26 seconds ago



35 seconds ago



Paris GABRIELLE1 1 minute ago

cities and many locations in Europe and beyond. For example, in Montpellier, the arrangement of the Martians was designed to form a giant Invader on the map.

This positioning detail became even more fundamental in 2008, when Slama, thanks to to the advent of QR Code technology, develops a new series of martians. Made from black and white tiles, they conceal images, videos or phrases that can only be viewed via your smartphone. In addition, the FlashInvaders app is invented, which allows you to 'spot' and 'flash' Invader street mosaics. The goal is to fill your own gallery of installations, earn points and compete with other players. For this, Slama assigned a score from one to ten for each mosaic.

he motivations behind this project are very simple: Slama wants to free art from its usual alienators, museums or institutions, a concept that is then reused to free Space Invaders from the video game and bring them into the physical world. The aim is to leave a mark not only in the city, the cradle of man, but also in people's minds.

Bringing an old game back to its former popularity, making it known to new generations who have lived with its symbols and teachings without ever fully understanding where they came from.

Even more important is the interaction between city and man, a fundamental pair for the development of our society. Among the various ways of getting to know, experiencing and sharing an urban area is also the one guided by play and art.

If learning by playing is the method that children find useful for getting to know the world, why not

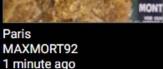
1

Paris LAUROUX 38 seconds ago



Paris LES PATATES DE L'ESPACE 55 seconds ago





Paris OCEBTLR

Paris

LEACNTR

20 seconds ago



FAUBOL IN ONTMARTS

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The urban innovation is also blatant for residents, so much so that the home-work commute becomes a way of looking for Invaders in the city, a new, more carefree and playful relationship with the worker is created.

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do it again with the help of technology? Slama decides to carry out a project that is much more challenging than it may seem, beyond the classic 'wanting to bring art to the streets', it is really about bringing people closer to popular culture and allowing them to visit Paris, London or Los Angeles in peace and fun, guided in an alternative way by little Martians.

C.

A QUEST FOR GEOCACHES: THE PERPETUAL TREASURE HUNT

Geocaching is a technological evolution of the classic treasure hunt, in which participants, called 'geocachers', use a GPS device or an App on a Smartphone to hide or find containers of different types and sizes. These containers are called 'geocaches' or more simply 'caches'. Thisistheperfectexampleofan'experientialgame', in other words, a game where one can get involved and guided by a game to have as a reward the discovery of all those meanings gathered by a place.

Geocaching was born in 2000 in the United States, when Bill Clinton's administration removed Selective Availability from the GPS signal, which was the disturbance that compromised its accuracy, bringing the uncertainty from the then 100 metres to the current 5 metres. For GPS enthusiasts at the time, this was a remarkable development and Internet newsgroups were immediately populated with ideas on how GPS technology could be used.

On 3 May 2000, Dave Ulmer, a GPS enthusiast, wanted to test the accuracy of the signal by hiding an object in the woods near Portland, Oregon. He called this idea the "Great American GPS Stash Hunt" and published it on an Internet group of GPS users. The idea was simple: hide a box in a place and note down the coordinates. The hunter was supposed to find the box by locating it using his GPS device. With a simple rule: take something from the box and leave something inside. This first box, which contained a logbook (i.e. a logbook in which to record one's visit), a pencil, some books and videotapes, was found after three days by Mike Teague, who immediately shared his experience online. In the following weeks, as happens with many new ideas on the Internet, this concept spread quickly. After a month, Mike Teague began collecting geographical coordinates on his personal page the geographical coordinates of places around the world where new containers were placed waiting to be found.

Geocaching therefore works in a simple way: all you have to do is register online at www.geocaching.com, have a GPS device and invest time in the search.

Players (geocachers) are divided into: hiders and seekers and each can be either one or the other. The hiders hide a treasure (the cache), usually in the vicinity of places worth visiting, whether in the city or in a non-urban context, and acquire its geographical coordinates. These coordinates are published on the official website together with a listing, which includes a description of the place, its history, related curiosities and a classification of the type of terrain and difficulty in finding the cache.

As seekers access the site, they consult the information and set out to find the Geocache. There are some basic rules that seekers need to follow: keep an eye out in order to spy the cache's camouflaged hiding place, once it is found, the log-



book need to signed, exchange one item and put everything back like you found it. the most basic rule is to leave no trace during your hunt. In this way, for each 'found', the seeker earns 1 point.

The involvement in this game is universal, it is suitable for every age range, in addition to the passion for travel, the outdoors, and technology, is certainly the curiosity that makes 'children eager to play'. Geocachers are families with children, young people who enjoy sports activities, people who are no longer active in their jobs, but who are eager to travel and discover new places.

It is also very much needed for all those people who what to create an outdoor lifestyle in an urban environment. It is convenient to bike to work and find a cache along the way or to walk instead of driving to a geocache event. Searching for Geocaches is easy for everyone who has a busy life too. They can geocache on their lunch break and they may discover wonders they walked past a million times. Also, people can do an urban hike and explore the neighborhood and introduce geocaching to coworkers and use it as a team-building activity.

In 2012 the official GeoTours were born, which are a set of caches that lead geocachers along a route within a specific area. The caches can be along a trail, through historical sites, in a park, and even in the middle of an urban area. A GeoTour's philosophy is to rediscover, in the words of Bruce Chatwin, the 'ways of song', and aims to evoke the small and big stories of the places that become part of the game itself. The creation of a GeoTour is usually carried out by an organisation (city, region, park) that intends to offer an alternative and engaging way of visiting, creating a shared worldwide destination. In fact, GeoTours are accompanied by a robust promotion through Geocaching. com's social channels and with selective newsletters that intercept 3 million users per week who have already been made aware.

Geocaching is also popular in the city, as there are currently 2,330 geocaches in Milan and its surroundings. However, recently the Urban Family Cache was added to the Geocaching family. It is a proposal of new, family-friendly itineraries to discover the city suburbs through geocaching. Urban Family Cache teaches us that suburbs, often ignored in tourist itineraries, can hold great surprises in store for us, revealing places of great history, charm and livability.

The itineraries showcased historical, natural and landscape aspects that are extremely relevant to the city's culture, accompanied by a series of geocaches placed in very significant locations such as the city's waters, industrial archaeology artefacts, and evocative green areas that are almost unknown.

Geocaching is truly the ultimate game for travellers and it is a perpetual treasure hunt thanks to the cooperation of its participants.







wha t's COU çou



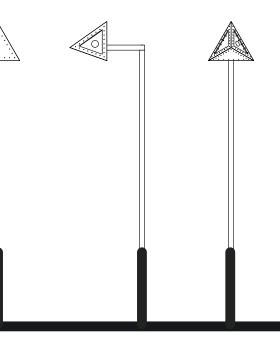






COUCOU is meant to be the touchpoint between nature and city. It has been created in order to allow kids to enjoy the company of the other inhabitants of the city. Its aim is to encourage people to slow their routine down and enjoy the place where they live on a daily basis.

The aim of COUCOU is to encourage the creation of a more sensitive, pedestrian-friendly and child-friendly city. If children are the future of a country, it is only right to provide them with all the tools they need to understand the world and its mechanisms, in this case the natural ones. As a result of the 2020 lockdown, more and more children have become more stressed and, consequently, more aggressive. Those who had a balcony or a garden were the luckiest people in the world, able to spend their days outdoors. Thinking about a city situation where outdoor spaces are often lacking, makes one realise how city children have been tested by this period. After the lockdown, city children spent less time than a prisoner in the open air on a daily basis. Why does this happen? Here are the most common causes: charac-



teristics of individual children, parental restrictions, physical and neighbourhood environments - Societal beliefs around parenting roles and ideals - Diminished feelings of community

One important issue is the speed at which our lives unfold. Adults are always in a hurry, there is not much time to follow their children to the park or check on them while they play outside, it is much easier to get them close to the TV, less risky. COUCOU was created specifically to accompany children in their daily discovery of nature, to encourage them to go out and observe the world, to make them understand the changes that nature can generate, such as atmospheric changes that affect different materials, or vital changes such as an egg hatching or a sparrow taking flight.



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$\{8.1 \ {}^{were \ does \ coucou's}_{shape \ come \ from?}$

COUCOU è nato a febbraio 2023, quando ho ripreso in mano la mia vecchia ricerca sull'identità urbana e l'ho completamente stravolta. Mi trovavo a Marsiglia, in Francia, per svolgere il mio semestre in Erasmus. Dovevo trovare una tema su cui ricercare per potermi mettere al passo con i miei nuovi compagni, così si è presentata l'occasione di iniziare a scrivere la mia tesi di laurea magistrale.

Ciò che mi ha fatto venire in mente il concept del mimetismo urbano è stato un cartello presente sulla via tra Nizza e Marsiglia. Mentre guardavo fuori dal finestrino, mi sono accorta di questo oggetto rosso dalla forma appuntita e non avevo idea di cosa si trattasse. Quell'immagine non mi è più andata via dalla mente proprio perchè continuavo a chiedermi di cosa si trattasse. Col tempo questo ricordo è stato la base dei numerosi schizzi che hanno portato alla realizzazione di COUCOU.

Al termine del mio semestre francese, COUCOU risultava come nella foto sulla destra: un prototipo finito, ma con qualche meccanismo da ripensare.



a. COUCOU is too small for proper nesting

b. The nest suitable for only a few species of birds

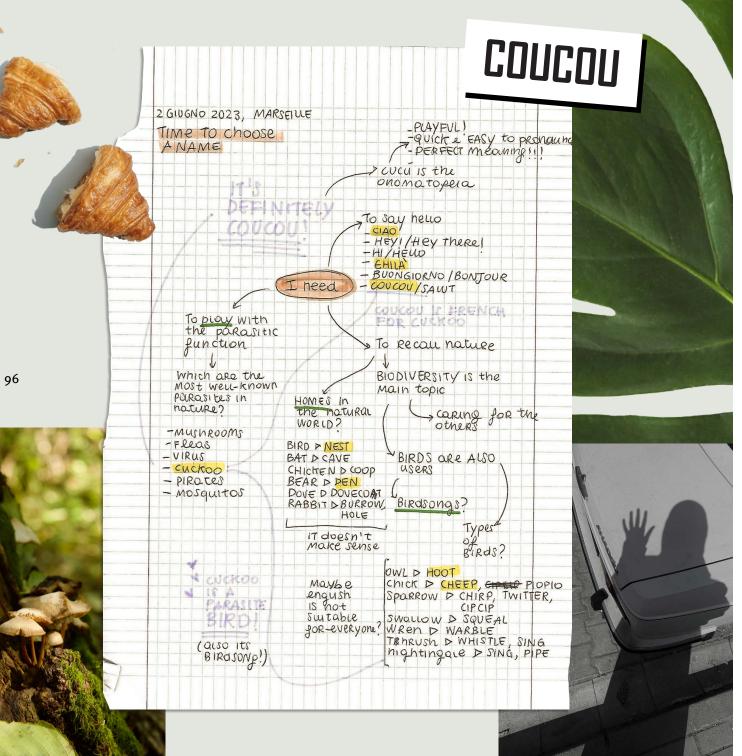
c. COUCOU is positioned at a comfortable height for bird watching, but it is invalid for birds, it needs to be raised off the ground even higher

d. With a nest placed higher it will be difficult to anchor them firmly to the boundary posts, so it is advisable to find another location for the COUCOUs, or make them self-supporting

e. The various sides of the nest are difficult to assemble during the workshop, so a more intuitive and practical way must be found for the children's capabilities

f. The nest must be dry and warm inside, so that the birds can nest properly. It is therefore advisable to have well-insulated and waterproof walls





8.3 ETYMOLOGY OF THE NAME COUCOU

The product's name, COUCOU, comes from the homonymous bird written in French.

The Cuckoo, however, is best known for its peculiar characteristic of brooding parasitism; a particular form of parasitism that occurs when a female lays her eggs in the nest of a pair of birds of the same or a different species. The Cuckoo is therefore in effect a parasitic bird that does not build its own nest but uses that of other birds, especially passerines.

Once the female Cuckoo has located the nest of the unfortunate (and unwitting) adoptive parents, she waits for them to lay their eggs and at the first opportunity she enters the nest. At this point she removes one of the eggs present, lays her egg and flies off. The cuckoo's egg hatches in considerably less time than those of the passerine (about 12 days thanks to the egg's internal incubation) and as soon as the chick comes to light, following an instinct inherent in its genes, it gets rid of the other eggs in the nest that have not yet hatched. The adoptive parents are fooled by this behaviour and feed the cuckoo as if it were their own nestling for 2-3 weeks until it hatches.

The adoptive parents obviously do not realise the deception; each female Cuckoo specialises in imitating only one type of egg during her lifetime and lays her egg in the nest of the species that raised her. In this way, the colour and size of the egg are similar to those of the adoptive species, which then does not care for the enormous size the stepchild manages to achieve.

tion to Africa.

This strategy seems to have been positively selected by evolution especially in some species for a number of undoubted advantages, the most notable of which is that, without the imperative process of rearing young, the parent is free to use the saved energy to produce more eggs.

This behaviour usually surprises most; the chick and the nest are linked to ideas of tranguility. security and parental care. In the cuckoo's case, on the other hand, the indifference of nature and the power of evolution come to the fore. The 'dastardly' mother will not take care of her 'cruel and ruthless' son, to whom no one has explained how, she knows instinctively that in order to survive she will have to throw the other eggs out of the nest, and once he has grown up, it will always be instinct that will guide him on his solitary migra-

As the concept for this product was born while I was on Erasmus in Marseille, France, I thought it pertinent to use the name COUCOU in reference to the parasitic bird, known to lay eggs in other people's nests, just as COUCOU attaches itself to a stake in a parasitic manner. But coucou in French also means 'hello', in a highly informal and friendly way, what the product is meant to communicate. By proposing a product that encourages a kind of 'treasure hunt', every COUCOU you visit encourages contact between people and species. The subtitle is 'say hi to nature', recalling the theme of friendliness, meeting and visit.



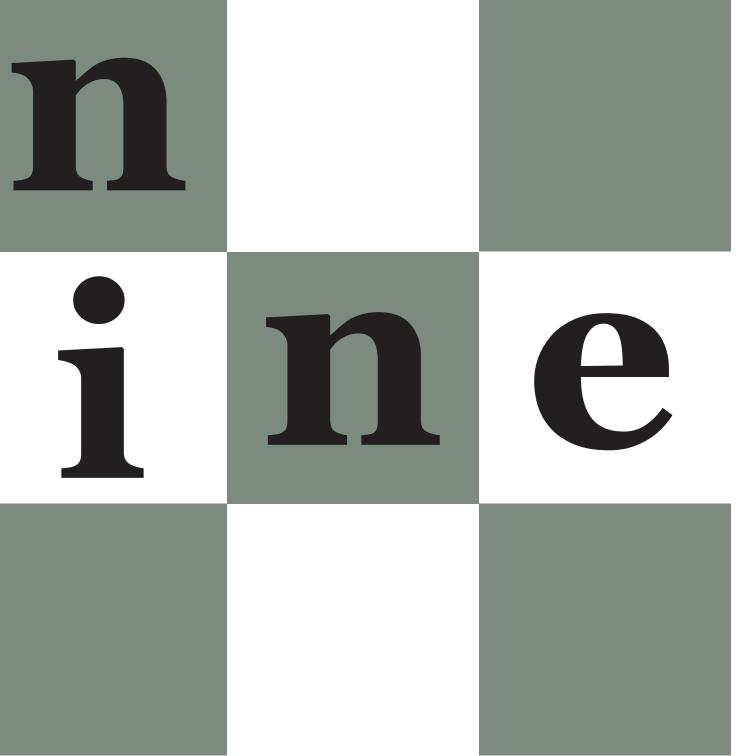
$\{8.4^{\text{TEACHING VALUES}}_{\text{WITH NATURE}}\}$

Thanks to COUCOU, children of all ages can admire nature, understand its developments and its times. They learn the discipline of 'do not disturb' or 'do not touch' as a sign of respect for another living being. One can also learn to fraternise with other children engaged in the same activity, create new routines and commit oneself to maintaining them. Through the workshop, the children feel part of the project, true helpers of nature, playing at being architects. They learn important skills, such as how to sew, assemble, observe shapes and their abilities. Seeing their work finally completed and used gives them enormous satisfaction, excitement and confidence, many will be willing to visit the COU-COU they made and show it to their loved ones. So COUCOU is reserved for small and curious birds, affectionate with humans, for observation by everyone, even the youngest, and for realisation by primary school children.



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we're inneed ofbird boxes

magistrale tesi



{9.1 BIRD DISPLACEMENT IN ITALY: WE NEED MORE BIRD BOXES

Many bird species breed in tree cavities and holes in branches. This strategy has obvious advantages: a cavity offers protection from the weather and makes access to the nest more difficult for predators; it also allows the young to stay in the nest for longer so that, when they leave it, they are already more developed than is the case, for example, for ground nesters. Only woodpeckers dig their own nesting cavities. Other cavity nesters depend on a sufficient supply of nesting sites. Competition for cavities is often fierce. The shortage of natural cavities has become even more acute with the increase in the felling of tall fruit trees and the exploitation of forests. Today, there is a shortage of housing in the forest and countryside in many places, but also in private gardens and city parks there is a lack of cavities in trees. For this reason, less demanding frequent species such as the Common Redstart, Great Tit, Black Tit, Nuthatch and Tree Sparrow also take advantage of nest boxes.

In nest boxes, breeding success is mostly greater than in natural cavities. The reasons are better protection from moisture, cold and predators. Nest boxes are often equipped with protective mechanisms such as a "porch" or an intermediate wall that prevent predators from reaching the brood. The choice of location and mounting system also decide the protection that a nestbox offers. Birds also use tree cavities and nest boxes outside the breeding season. Especially small species, but also the Owl or Kestrel, spend the cold winter nights in a cavity or nest box, exploiting their insulating effect and thus saving valuable energy.

Originally, nest boxes were not used for the protection of birds at all, quite the contrary: sources dating back to the 16th century reveal that nest boxes (so-called 'starling pots' made of earthenware) were hung up at that time and the young birds were eventually turned into tasty soups.

In the 18th century, the idea was developed to support birds as useful insect-eating animals. Following this assumption, numerous nest boxes were hung in orchards and forests in the hope of achieving a decrease in harmful insects through an increase in birds.

It was not until the 19th century that people began to design nest boxes according to the model of woodpecker cavities. A pioneer in this field was Hans Freiherr von Berlepsch from Seebach in Germanic Thuringia, who made precise observations and then developed the first prototypes of today's nest box models together with a wooden shoemaker. In 1908, Freiherr von Berlepsch himself founded Germany's first bird protection station.

Nest boxes were also the first activity around which bird protection associations concentrated. At that time, large-scale actions were launched to build and hang them, and even today the maintenance and control of nest boxes and other artificial nests are part of the important tasks of many of these associations.

Nest boxes have maintained to this day their great importance for the conservation of species. Their effect is greatest where these activities are combined with habitat enhancements.









VASE SHELTER - Esschert Design

Material: clay and wood Hole: rounded, 32 *Dimensions:* 136 x 245 x 173 Can it be opened? no

Based on a 17th century model. this vase-shaped shelter is perfect for garden birds. The oval hole showed in the picture must be placed against the wall because its only function is to allow cleaning the shelter in fall season, even if it is not very comfortable to do so. The entrance to the shelter is the actual edging hole of the vase. It also has a resting wooden perch.

WOODEN NEST - Esschert Desiqn

Material: ESC-certified wood and zinc-coated metal *Hole:* rectangular, 110 x 170 *Dimensions:* 193 X 210 X 330 Can it be opened? no

This birdbox, although indicated as suitable for Redstarts, has a hole that is too large to provide them with the right shelter from predators and weather. Although it has a galvanised steel roof, which is therefore perfect for outdoor use because it is corrosion-resistant, there is no good thermal insulation. With such a large hole, cleaning is facilitated, but still limited.



NESTING HOUSE - Windhaaer

Material: wood and felt Hole: rounded, 33 or 28 *Dimensions:* 150 x 160 x 310 Can it be opened? no

This birdbox gives the user the chance to interchange holes. This feature makes it possible to customise the box according to the needs of your area and its inhabitants. The user can choose between a 28 mm or a 33 mm hole or no hole at all. The one that is not assambled can be conveniently stored at the base of the box. Removing the holes is also the only access route for cleaning the box, which makes it particularly difficult due to its depth.



BIRD HOUSE - SwallowtailPottery on Etsy

Material: ceramic Hole: rounded, 32 Dimensions: maximum ø 18 Can it be opened? yes

This pottery bird house is ideal for the redstart. It can also be easily cleaned by opening the pot from the cap.

It has a drainage hole on the bottom as well as a perch hole on the front.

It is hung by means of the lanyard provided, which, by passing through two holes in the cap, prevents it from escaping, even by accident.



1 MR BIRD HOME - Scubla

Material: woodcrete Hole: rounded, 32 *Dimensions:* 190 X 230 X 270 Can it be opened? yes

The perfectly shaped nest tracts the attention of bird and is ideal for wall or ba conv mounting. Woodcrete h excellent insulation propertie and is also a natural material sistant to pests and rot. special bracket. To prevent birds from compe-To clean the bird home, simply remove the front wall. After turting with each other, there's a ning the lower locking screw specific hole dimention. 180°, the front wall can be re-The properties of woodcrete moved by pulling it downwards. have already been mentioned. This will provide a perfect view The front wall can be easily reof the entire brooding chamber placed and then dismantled to facilitate cleaning of the box. and the inside of the roof.

106

107



1 B BIRD BOX - Scubla

Material. woodcrete

	Hole: rounded, 32 Dimensions: 230 x 160 (h x ø) Can it be opened? yes				
at-	This 1B bird nest has a hatching				
	-				
rds	chamber with an inner diameter				
al-	of 12 cm and is generally fixed				
nas	to trees with the special alumi-				
es,	nium nail. The nest box can also				
re-	be hung on a branch with the				

{9.3 BENCHMARKING: UPCYCLING TO CREATE DIY BIRDBOXES

It is not uncommon to see DIY nesting boxes in gardens. Creativity really takes over and it is interesting to observe how, many times, this practice leads people to unconsciously upcycling.

Many of these boxes are bizarre and curious, but sometimes they do not meet the needs of the birds, either because of the choice of material or because they do not provide thermal and weather insulation.

Many of them cannot even be properly opened and cleaned of guano and egg residues, which will discourage the arrival of birds the following year.

Generally, those who make do-it-yourself bird boxes do so to enrich their garden and to save some money while having fun. It is good to encourage this behaviour because it is highly environmentally friendly, but it is also good to educate about animal welfare.

Ceramics and terracotta are excellent materials for building nest boxes, so much so that we have also seen them used in objects that can be sold to the public. Plastic and metal, on the other hand, could give problems. Metal could overheat, cool too much, rust and corrode, while plastic is not a good thermal insulator. Books might be a good choice when it comes to thermal insulation, but very inadvisable when it comes to weather resistance.





109



BENCHMARKING: DESIGN THINKING APPLIED TO BIRD BOXES

Fanny Hofstra, a dutch designer created Bird Bricks. This is a family of three birdhouses specifically designed to help the house sparrow, house martin and the spotted flycatcher, among others. The Bird Bricks meet all the requirements that these birds search in a nesting place.

These brick birdhouses camouflage themselves with real bricks, making birdlife an integral part of city life.

They can be placed in any stone building at a minimum height of 2 metres. If you want to make place for colony birds, such as the house martin and the house sparrow, you should place several Bird Bricks on the wall. This is because these birds live side by side. You can also create beautiful patterns on the wall this way.

Other birds such as the spotted flycatcher appreciate their privacy and their Bird Bricks should be placed at least 3 metres apart, creating a more subtle pattern on the wall.

Bricks are usually installed in new buildings or during major renovations, but it is possible to retrofit them into an existing wall. Bricks are the preferred option as they slot discreetly into a wall, offer a cooler environment for the birds, do not require any maintenance and should last the lifetime of a building.

This is not the first example of brick birdbox,

actually they were born about 30 years ago.

In the United Kindom, a petition to make swift bricks compulsory in all new housing has more than 100,000 signatures and has been debated in parliament on July the 10th 2023. Sadly, this is the response that the UK parliament gave: "We welcome actions by developers to provide swift bricks, however Government considers this a matter for local authorities depending upon the specific circumstances of each site". So no effective protection was applied



${9.5}$ KLAAS KUIKEN *designs "birdhouse"*

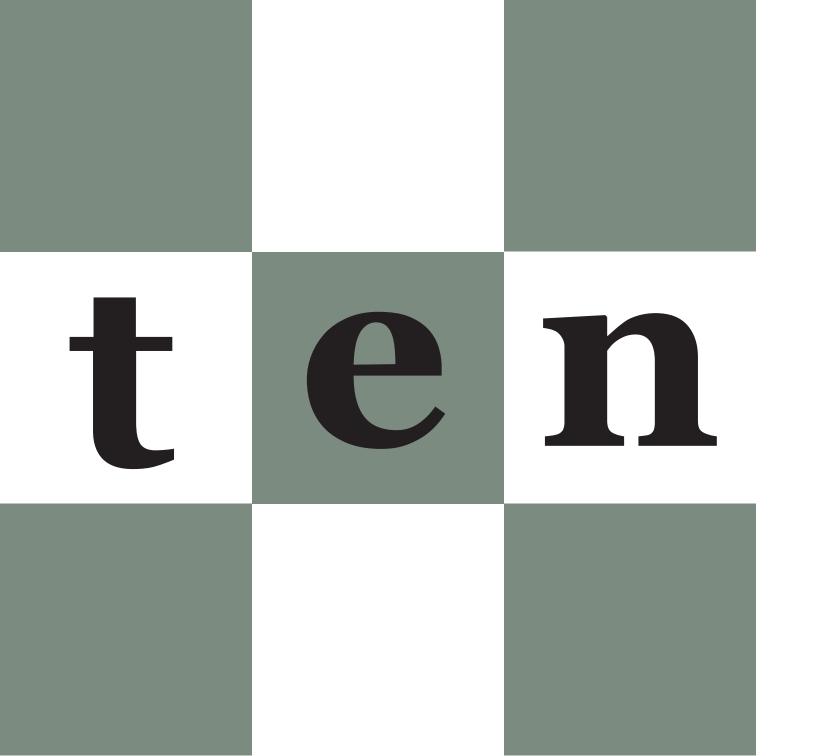
In consultation with Vogelbescherming Nederland (Dutch organization concerning the protection of birds), Klaas Kuiken developed the Birdhouse; the merge of a basic terracotta roof tile with the archetypal shape of a house. The result is a remarkable product that not only looks good, but also contributes to the increase of the bird population in cities and villages.

A product that contributes to the increase of the bird population in cities and villages

Inside the Birdhouse, underneath the roof tile, a carefully designed nesting basket made of wood and bird screen is attached. This nesting basket ensures good ventilation, prevents the birds from moving to other places underneath your roof and makes it really easy to clean the nest after a breeding period.

By installing one or more of these Birdhouse roof tiles, you make sure that our beloved birds are provided with a safe place to stay and raise their chicks. Instead of crawling under the rooftiles to build a nest, the birds can now linger in their own cozy cottage.





fram ing the solu tion







a.

Primordial study model to observe how to make an equilateral pyramid with a triangular base.

а.

b.

Consideration was given to the possibility of creating the nest by means of faces and frames, within which faces of different materials could slide. The joining of the faces was still rudimentary as it was not the object of study of the model.

C.

Prototype from the first phase of Coucou's design, much more focused on the child experience than on animal welfare. It was decided to make several faces with two frames, inside which a sheet of different material would be glued and then joined with rope to be woven. This procedure is extremely difficult for many as the pyramidis built and there is less and less space for easy sewing, not quite suitable for kids to handle comfortably. ${10.1 \begin{array}{c} \text{COUCOUNEST} \\ \text{EVOLUTION} \end{array}}$

b.

C.

d.

DOC DOC

d.

Attempt to embellish Coucou with laser-cut textures. In addition to the aesthetic quality, they were looking for the bending functionality of the wood, so that the nest could be made from a single piece of plywood. The chosen texture was not effective, so much so that the product ended up breaking due to the too much bending required.

Last prototype of the nest is made of polyplat. The issue to be tested was the functionality of opening the nest by means of waterproof fabric inserts so that the nest can be opened completely flat and easily coloured. The closure at the tip is superficial as it was not the object of study when the study model was made.

е.



$\{10.2$ ROAD SIGNS:

MIMETIZING IN THE CITY

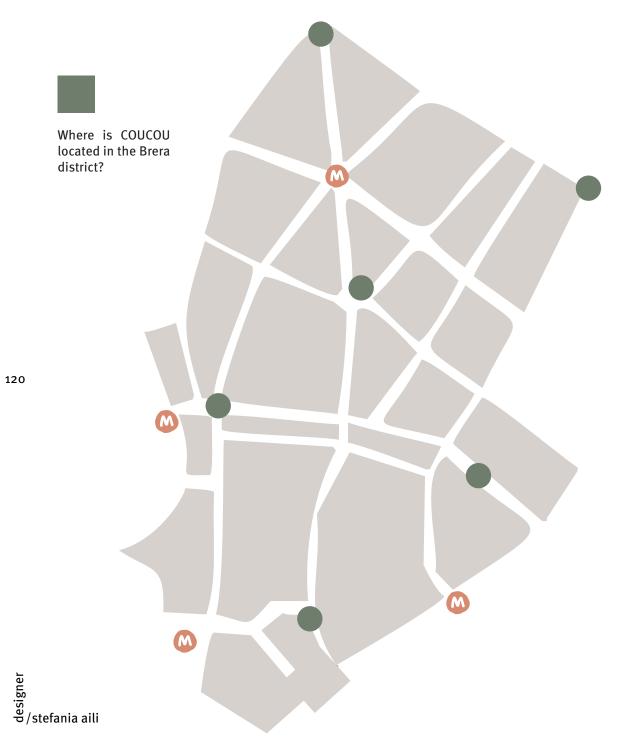
The concept of COUCOU was inspired by road signs, an important vertical signpost useful for tourists and non-tourists to find their way around the city. They have interesting structural features such as: a bare and essential body, necessary only to support the information panel.

MAN AT WORK

-

The latter uses a clear and sympathetic language, easy to interpret, an almost totally universal way of communicating information. The panel is placed high up and clearly visible to the observer, it is large and bright in colour.





THE PLACEMENT: TORUING A 15-MINUTES CITY $\{10.3$

mily life.

Several units of COUCOU will be placed throughout the city of Milan. On the left there is an example of positioning developed in relation to the neighbourhood of Brera, a place full of beautiful and iconic places to visit. The Design district favours adult life and fashion engagements over nature and fa-

The 15 minutes city is a urban planning concept about proximity and walkability. Most of the residents' daily needs should be met by walking or cycling directly from their homes. This is the concept that has inspired the COUCOUS' placement, in order to reach everyone's needs.

The COUCOUs will be arranged at a walking distance of about seven minutes from each other. The concept of the city in 15 minutes is respected, however, as the aim is always the same: to have the service at hand. This close positioning is designed to stimulate the COUCOU 'treasure hunt'. Thinking of the city as a tour, it is good that the various attractions are placed close together so that as many as possible can be visited in a short time. The proximity of the COUCOUs will ensure that you are not tempted to use public transport to get around, also because the first available metro stop will probably be further away on foot than the next COUCOU. Thinking of a young target group it is good to incentivise walking, while thinking of a globalised techno-flexed user it is good to transmit stimuli close in time, so visiting a COUCOU and after seven minutes finding another one is a good workout to try to slow down

Thinking of the last living being this project is aimed at, the birds, with a view to repopulating the city with birds, so that urban biodiversity can be protected, it is good to provide enough birdboxes to allow them to nest. Each BIrdbox should be placed at least ten metres from the nearest one, so that the territorial instincts of the birds are protected. The current placement of COUCOUs is much further away than ten metres, so this does not exclude the possibility that, if the initiative receives the right support and there is demand from a growing public, the 'colony' of urban COUCOUs could be increased.

tesi magistrale pea

one's daily and frenetic routine, without having the feeling of being bored, which generally occurs when a stimulus is very slow and prolonged. The mind of the globalised techno-flex has a need for speed and novelty, so a reduced commute may be the right solution for this type of user.



ISSUES ENCOUNTERED {10.4 DURING THE FIRST DESIGN FASE

Colour is important for many bird species and they rely on colour clues in their environment in different ways:

a. Bright plumage colours indicate a mature and healthy bird that will make a strong mate

b. Molting to brighter colours indicates the beginning of the bird's breeding season

c. Coloured markings can be warnings against plant toxins or strong predators

d. Brightly coloured fruit is ripe and ready to eat at the peak of its nutritional content

e. Bright flowers are full of nectar and attract insects for another food source

f. Changing leaf colours can indicate changing seasons and the time for migration

Since birds are so attuned to colours, using the right ones can be a creative and beautiful way to attract birds, especially in late autumn and winter when less natural colours may be available.

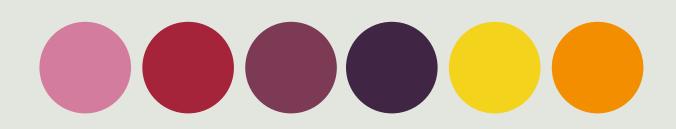
Natural camouflage colours such as grey, brown and green are excellent choices for attracting birds with more nervous temperaments, such as doves, quail, thrushes and other ground feeders, so deciding not to use them could be helpful in protecting their prey birds. While brighter colours are attractive to birds, one

colour in particular should be avoided as much as possible: white. It is seen as a signal of alarm, danger and aggression for many birds. In fact, many birds use white in their plumage as a warning, such as the white flash of the tail feathers of a dark-eyed junco or the white patch on the wings of a northern mockingbird.

Birds see a wider range of colours than people and their plumage has colours that humans cannot see. Using four colour cones in their eyes, birds are able to see ultraviolet light. The researchers suggest that some birds may be able to distinguish their own eggs from those of other birds by detecting the ultraviolet variance in egg colours.

Talking specifically about the Redstart, it loves to feed on barberries, serviceberries and persimmons, so it is appropriate to use colours that echo those of these foods such as red, purple and orange. Its diet also includes insects, which it generally catches during flight.

An effective strategy would be to use useful colours to attract these prey, as a nest with favourable life-supporting characteristics, such as an



abundance of food, may encourage the Common Redstart to settle inside it. Its favourite insects include: butterflies, tipulas, flies, wasps, hoverflies, aphids, ants and small beetles. Using colour as a means of attracting the Redstart's prey, there is a need to integrate vellow and orange into the colour palette. Thanks to the garish and vivid colours, the insects will think they are approaching a fruit. Their ability to spot colours from a distance prompts them to approach in search of food.

310.5 FOC	VICE BLUE PRINT: US IS ON THE FOMER						
1 month SHARING THE INITIATIVE	It depends PARTICIPATION IN THE WORKSHOP	20 minutes STORYTELLING OF "IL COINQUILINO A-LATO"	40 minutes BIRDBOXES DECORATION	15 minutes COUCOU INSTALLATION	15 minutes VISITING ONE'S COUCOU	lt depen QUEST FOI COUCOU	
a. School newsletter b. Article on the mu nicipal website c. Post on the municipality social networks d. Posting on the bulletin board of the hosting facility	a. Google form b. Hosting facility	"ll coinquilino a-lato", illustrated tale for children	Painting tools	a. Dividing posts b. Fixing brackets c. Blind rivet nut d. Wrench e. Nuts and bolts f. Coucou spike	a. Coucou b. Binoculars	a. Coucou b. Binocula c. Map d. GPS	
Citizens are informed about the munici- pality's initiative "Coucou: say hi to nature" to protect uban biodiversity	Interested children register for the wor- kshop and show up at the agreed upon location	Reading the illustra- ted tale to under- stand the purpose of the workshop	The partecipants are divided into trios. Each group devotes itself to painting a Coucou, collabora- ting to choose what to depict	Each Coucou is in- stalled at the end of its pole, and then the pole is anchored to the dividing post	The children partici- pating in the work- shop are interested in seeing their own Coucou hanging in the city streets, so they go find it and visit it	Curiosity to a all the Coucou find out if any of birds have inside promp to tour the cit visit all of the	

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ST FOR THE



30 minutes

COUCOU CLEANING

cou oculars S a. Wrench b. Sander c. Neutral soap

PHYSICAL EVIDENCE

y to admire oucous and if any pair have nested rompts one he city to of them

In winter, the Coucous are disassembled and cleaned so that they can be reused the following year

CUSTOMER JOURNEY

EMOTIONAL JOURNEY

{10.6 SERVICE BLUE PRINT: FOCUS IS ON THE CUSTOMER									
	1 month	It depends	20 minutes	40 minutes	15 minutes	15 minutes	lt depe		
	SHARING THE INITIATIVE	PARTICIPATION IN THE WORKSHOP	STORYTELLING OF "IL COINQUILINO A-LATO"	BIRDBOXES DECORATION	COUCOU INSTALLATION	VISITING ONE'S COUCOU	QUEST FO COUCO		
	The municipality of Milan is doing its best to spread the word about a new initiative for the com- munity: building nest boxes for the city's birdlife.	Since accesses are limited, children, after asking for permission to their parents, must regi- ster for it on the the Google Form which is provided by the municipality. Partici- pants must also tra- vel to the workshop location.	Children arrive at the agreed location to start the workshop. The young artists are divided into groups of three. The "Il coin- quilino a-lato" tale is read.	After that they need to drawn on the Coucou faces what they loved the most about the tale using various painting tools.	Coucou is locked with the customised tip and installed on the different poles in the city district.	Intrigued kids will be eager to find the Coucou painted by them. With binoculars in hand, they will head off, together with their parents, in se- arch of their Coucou.	The visit bed a tour to see birds have n their nests i of the bird b to admire th gns of their		
	Selection of a loca- tion to host the work- shop and production of leaflets, posts and newsletter to promo- te the initiative.	Reception of all the information through the Google Form. Trios are now made. Gathering all the participants.	Creation of the book to be read, emphatic reading of the story, reception of chil- dren's reactions and questions.	Showing the colour palette and explai- ning why it was chosen, presenting the rules of the workshop and the various tools avai- lable, restocking the containers with paint when needed and, finally, sealing paintings with tran-	Using the various tools, proceed with the installation, taking care to point each Coucou in the direction of the next one	The children's request to visit their own Coucou, to see if it was inhabited by someone, encou- rages their parents to take part in the activity.	By walking a the city you explore it 'u discovering places in yo ghbourhood new to know people, get into birdwat and paying a to the world you.		

sparent enamel.



epends

FOR THE JCOUS

becomes see if any e made ts in some d boxes, or the desieir mates.



30 minutes

соисои CLEANING

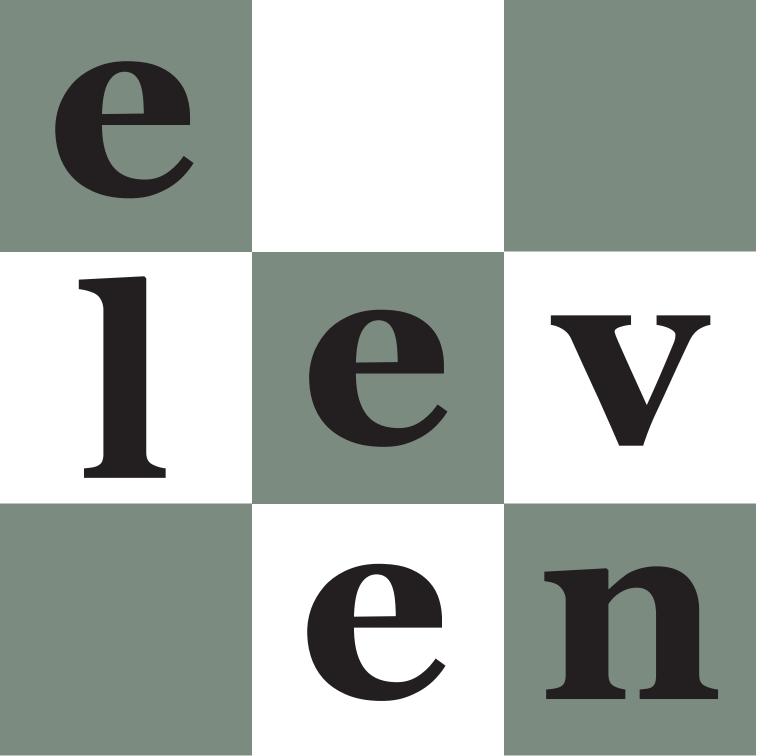
When the temperatures begin to drop, the Coucou and the poles on which they were affixed are dismantled and cleaned up.

FRONTSTAGE ACTIONS

ng around ou can 'up close', ng new your neiood, getting now new get yourself vatching ng attention rld around

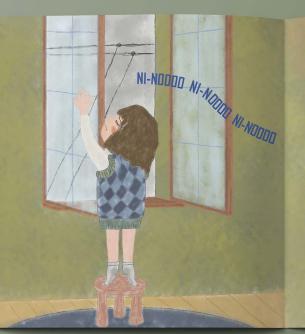
The workshop workers remove the old nests inside the Coucou, clean them with mild soap and water, and finally polish them so that they are ready for a new season and a new workshop.

BACKSTAGE ACTIONS



tale test ing





Si sporge dal suo davanzale

STORYTELLING TO PUT YOURSELF IN SOMEONE'S SHOES

"Il coinquilino a-lato" is a children's tale that I wrote myself. It was created in response to a very specific need: how can we communicate with children? Especially when the age range of the target audience is so varied? "Un coinquilino a-lato" is meant to speak to children from five to nine years of age, some of the most delicate years of growing up, during which they acquire many new faculties, such as reading and writing. Attention and interest levels also vary greatly and it is therefore important to meet everyone's needs.

The plot of the story is very simple and the moral is well emphasised. Margherita has to move to the city because of her father's new job. Initially, she does not have many friends because she prefers to look at the world through her window to avoid the city hubbub she cannot bear. Her routine changes dramatically when something goes wrong: one morning her mother forgets her bedroom window open. When she leans out to close it, she notices a bird's nest right next to her windowsill. Always intrigued by the animal world, she tries to get close to them in every way, until she considers them to be real friends. The father, on the other hand, is annoyed by the presence of the birds as he fears that they may soil the facade

of the building, and thus disfigure the house, so he plans to tear down the nest. Margherita is inconsolable, so her mother decides to suggest that she build a bird box to be placed in the park near the house to help all the possible evicted birds. The father is very surprised by his daughter's plan and realises how much she cares about these new neighbours, so he decides to leave the nest where it is and care less about the appearance of his building.

The moral lies in understanding the importance of caring for all city dwellers and not just the human ones. Understanding that it is possible to live in harmony and comfort while respecting others and the ecosystem. Urban biodiversity must be protected and, indeed, fostered, as Margherita does by fighting to defend her bird friends and creating a refuge for all the birds that need it. In fact, she is 'rewarded' by her father, a peronage who is seen as the villain of the day, but who then, thanks to empathy and compassion, manages to have an important evolution during the course of the story. Of course, everything is explained in a much more simplified way.

There is no first-person dialogue, which is very helpful in allowing children to immerse themselves in the story completely. This is a move to create an introspective environment, so that Margherita and her world are introduced through her thoughts.

On an artistic level, full-page illustrations were chosen so as to allow complete immersion in the story during the narration. A warm, natural-toned palette accompanies all the pages of the short book, while as far as the choice of stroke to draw is concerned, a charcoal pencil was chosen for the outlines and a watercolor-style wet brush for the

shading fill. This choice made it possible to create a simple and delicate, soft and unobtrusive environment.

Finally at the graphic level, the Futura font was selected in 22 pt small print, colored white to allow for greater contrast with the background. This allows for easier reading for elementary school children who have only been approaching reading for a few years, whereas it is of little relevance to listeners looking at the pictures, such as younger children. It was also decided to include onomatopoeias with the Agency FB font in capital letters, a more rigid, sharp, shouty-sounding script, made with palette colors, but in stronger tones. Only for the birdsong was the Futura font selected again, more delicate and less overbearing, so as to indicate the positivity of the sound in comparison to the harshness of city noises.

${11.2}$ margherita's tale here to read

Margherita ha solo sette anni, ma la sua vita sta per cambiare per sempre

Papà Marco inizierà un nuovo lavoro. Ha spiegato alla figlia di come questa sia una bellissima possibilità per tutta la famiglia.

Margherita avrà una nuova cameretta e e tanti nuovi posti da scoprire.

Tutta la famiglia andrà a vivere in città, lontana dagli amici e dai luoghi del cuore.

Margherita non sembra essere troppo felice di questa scelta, ma suo papà è sempre stato molto fermo nelle sue decisioni e sa che è difficile fargli cambiare idea.

<u>La nuova casa di Margherita è al terzo piano di </u> un bel palazzo.

coinquilino

132

Camera sua si affaccia su un piccolo parchetto dove spera di incontrare tanti nuovi amici. Questa camera è perfetta e lei adora osservare la gente che passa per strada.

Non riesce però ad abituarsi al chiassoso rumore del tram che si ferma a pochi passi dal suo portone e a quello dei clacson arrabbiati e di fretta all'ora di punta.

Decide così di guardare il mondo dal suo oblò, attraverso il vetro, sembra tutto più bello senza volume e Margherita si diverte ad inventare conversazioni tra la gente che passa per strada.

nice building.

on the street.

si tesi magistrale

- Margherita is only seven years old, but her life is about to change forever
- Daddy Marco is going to start a new job. He explained to his daughter how this is a wonderful opportunity for the whole family.
- Margherita will have a new bedroom and many new places to discover.
- The whole family is going to live in the city, far away from friends and favourite places.
- Margherita does not seem to be too happy about this choice, but her dad has always been very firm in his decisions and knows it is difficult to change his mind.
- Margherita's new home is on the third floor of a

- Her room overlooks a small park where she hopes to meet many new friends. This room is perfect and she loves to watch people pass by on the street.
- However, she cannot get used to the loud noise of the tram that stops a few steps away from her door and the angry, hurried horns at rush hour.
- So she decides to look at the world from her porthole, through the glass, everything seems nicer without the volume and Margherita enjoys inventing conversations among the people passing by
- One spring day, having just returned from school, she finds something different in her room.

Un giorno di primavera, appena tornata da scuola, trova qualcosa di diverso in camera. La finestra è aperta! Probabilmente la mamma si è dimenticata di chiuderla questa mattina.

Il baccano cittadino è troppo rumoroso. Margherita si precipita a chiudere i vetri. Si sporge dal suo davanzale per raggiungere le ante della finestra, ma qualcosa attira la sua attenzione...

Nel sottotetto sopra la finestra di Margherita una coppia di uccellini ha costruito il proprio nido.

La bambina è emozionata alla vista del nido, e si chiede come mai la piccola famiglia abbia scelto proprio la sua finestra per costruire la sua casa.

Margherita decide di lasciare la finestra aperta per sentire il canto degli uccellini.

Qualche giorno dopo mamma e papà uccello si posano sul davanzale di Margherita, incuriositi dal luccichio del suo specchio al sole. La bambina li osserva curiosa e cerca di avvicinarsi a loro il più possibile, ma ben pesto la coppia prende il volo.

Mamma Elena consiglia alla figlia di lasciare sul davanzale qualche semino per invogliare gli uccellini a fidarsi di lei. Pian piano Margherita riesce ad avvicinarli e i due uccellini diventano degli ospiti fissi sul suo davanzale. Lei li considera dei veri e propri amici.

Li osserva cantare insieme e svolazzare fra gli alberi e i palazzi. È così invidiosa del loro vita

The window is open! Mum probably forgot to close it this morning.

The city hubbub is too loud. Margherita rushes to close the window. She leans over her windowsill to reach the window sashes, but something catches her eye...

In the attic above Margherita's window, a pair of birds has built its nest.

The little girl is excited at the sight of the nest, and wonders why the little family chose her window to build their home.

Margherita decides to leave the window open to hear the birds singing.

A few days later, mother and father bird perch on Margaret's windowsill, intrigued by the glitter of her mirror in the sun. The little girl observes them curiously and tries to get as close to them as possible, but soon the pair take flight.

Mama Elena advises her daughter to leave some seeds on the windowsill to entice the birds to trust her. Gradually Margherita manages to bring them closer and the two birds become regular guests on her windowsill. She considers them friends.

She watches them sing together and flutter between the trees and buildings. She is so envious of their free life in the sky, she wishes she could fly too.

libera nel cielo, avrebbe tanto voluto saper volare anche lei.

Papà Marco invece è arrabbiato. Non è felice della presenza degli uccellini. Pensa che sporchino la facciata della sua bella e nuova casa cittadina e quindi vuole abbattere il nido.

La bambina è triste ed inconsolabile. Il cuore le batte forte nel petto perché ha paura di perdere i suoi preziosi amici.

Con l'aiuto di mamma Elena decide di costruire una casetta per uccelli da posizionare nel parchetto sotto casa, così da aiutare tutti quegli uccellini sfrattati dai loro nidi.

Papà Marco capisce quanto Margherita tenga alla coppia di uccellini, i suoi nuovi "coinquilini con le ali", come li chiama lei, e decide di non togliere il nido dal palazzo.

Margherita ha trovato un po' di compagnia nella sua casa di città e ha imparato a lasciar la finestra aperta per far entrare il mondo esterno.

nest.

The little girl is sad and inconsolable. Her heart beats fast in her chest because she is afraid of losing her precious friends.

With the help of Mama Elena, she decides to build a birdhouse to be placed in the small park below the house, so as to help all those little birds evicted from their nests.

Daddy Marco understands how much Margherita cares about the pair of birds, her new 'housemates with wings', as she calls them, and decides not to remove the nest from the building.

Margherita has found some company in her city house and has learned to leave the window open to let the outside world in.

s tesi magistrale

135

Daddy Marco, on the other hand, is angry. He is not happy about the presence of the birds. He thinks they soil the facade of his beautiful new town house and therefore wants to tear down the

STORYTELLING TO PUT YOURSELF IN SOMEONE'S SHOES {11.3

In order to test the effectiveness of the fable "II coinquilino a -lato", I went to the 'G. Rodari' preschool in Vimercate (MB).

It was necessary to observe how the story was received from children, to pay close attention to the their ability to empathise, a quality that allows

them to put themselves in the shoes of the protagonist. It is also important to observe how users are able to take in the story. If there are words that are too complicated and if there is a willingness to learn some new lexical terms, then, in the case of unfamiliar words, if questions are asked. Attention span was also placed under observation. Interaction with the fairy tale, references to one's personal experiences and questions to understand the story more deeply are indices of good attention and interest in the activity, a key para-



meter to be tested to be sure that we can ensure proper enjoyment of the story for this age group. Being able to listen, answer questions, and demonstrate understanding is critical to fully understanding the objectives of Coucou's workshop.

The five-year-old children from the Aristocats' section ('the grown-ups') welcomed me enthusiastically, probably intrigued by the presence of a new and young person. Just after lunch, after saving goodbye to the youngest three-year-olds who had gone to rest, in the silence of the classroom, we started to narrate Margaret's fable.

I narrated "Il coinquilino a-lato" by turning the book towards my audience, so that I could show them the depictions of the scenes as I read them.

This 'investigation' into the correct enjoyment of the tale was supervised by the section teacher. Listening to me there were twelve attentive and intrigued children.

During the narration, the children made observations that were necessary for them to empathise with Margaret's story. "I live with my grandmother!", "Teacher, do you know that I also have to move house?", two children shouted at the moment when Margaret had to move house. "I also have a bird at home!" someone said, "I don't have a bird, but I have a cat and I love it!" someone else retorted. "Did you know that even on the tree in the garden where I live there's a bird house?".

The activity lasted about fifty minutes and consisted of three phases. In fact, following the reading of the fairy tale, I asked the children to draw what stuck in their minds most about the story of Mar-

garet. Each of them, armed with markers and sheets of paper, then proceeded to make a drawing. The last stage of the activity involved describing the drawing made in words. Verbalization, juxtaposed with graphic representation, is necessary to rework the fable and express one's thoughts in a timely manner. Many times there is a real language barrier between children and adults, depending on the former's degree of language proficiency, so taking advantage of graphic representation as a means of communication is essential for understanding, as well as necessary for children to remember and narrate.

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SIMONE "La bambina e uccellino"

"The little girl and birdie"

MIA

"La bambina non voleva andare nella casa nuova, perché non c'erano i suoi amici. Poi ha trovato un nuovo amico con cui giocare: la mamma costruisce una casetta per l'uccellino sull'albero"

"The little girl did not want to go to the new house because her friends were not there. Then she found a new friend to play with: mom builds a birdhouse for the little bird in the tree." ADAM "La bambina"

"The little girl"

ЕММА

"La bambina Margherita era andata nella casa nuova, e qui non aveva neanche un amico, ma aveva visto un uccellino e diventa sua amica. Il papà si è arrabbiato perché non voleva che l'uccellino sporcava la finestra. Alla fine la mamma e Margherita hanno costruito al parco una casa per gli uccellini e anche il papà era contento"

"The little girl Margherita had gone to the new house, and here she didn't even have a friend, but she saw a little bird and became her friend. Daddy got angry because he didn't want the little bird to dirty the window. In the end, Mama and Margherita built a house at the park for the little bird, and Daddy was happy too."

EDOARDO

"Ho disegnato quando margherita ha visto l'uccellino alla finestra"

"I drew when Margherita saw the bird in the window."

SOFIA

"Ho disegnato quando sono arrivati nella casa nuova"

"I drew when they arrived at the new house."







LICCLUCIALUCHLUTT

GABRIELLA

"La bambina era triste perché non aveva degli amici nella casa nuova"

"The little girl was sad because she had no friends in the new house."

SIBILLA

"Margherita ha cambiato casa e conosce un uccellino. Con la mamma mettono una casetta per gli uccellini sull'albero del parco"

"Margherita has moved house and gets to know a little bird. With mom they put a birdhouse on the tree in the park."

GIORGIA

"Margherita con la mamma e il papà vanno in una casa nuova in città. Non ha più i suoi amici. Conosce un uccellino"

"Margherita with her mom and dad go to a new house in the city. She no longer has her friends. She meets a little bird."

BIANCA

"La bambina piangeva perché il papà non voleva l'uccellino e la mamma fa una casetta sull'albero"

"The little girl cried because daddy didn't want the bird and mommy makes a treehouse."

LUCA "La bam casetta s "The litt the treek

"La bambina, il papà e la mamma fanno la casetta sull'albero per gli uccellini"

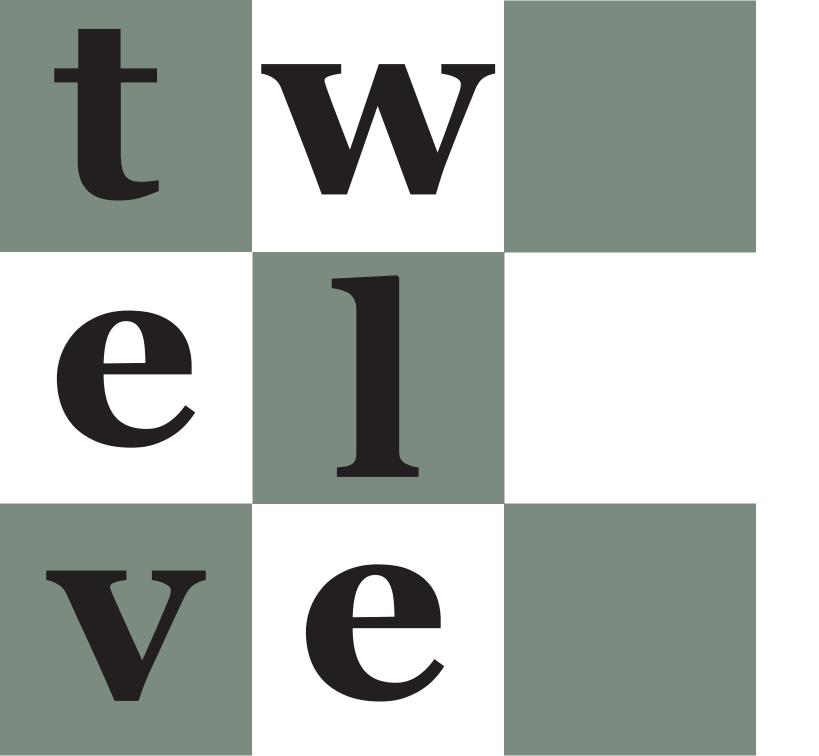
"The little girl, daddy and mommy make the treehouse for birds."

RICCARDO

"Questa è la bambina che piange perché il suo papà ha detto che l'uccellino sporcava la casa e vuole mandarlo via"

"This is the little girl who is crying because her daddy said the bird was dirtying the house and wants to send it away."





the ma king of





PAINTING COUCOU WHILE TESTING THE WORKSHOP

I asked Gaia and Riccardo if they would like to participate in the 'Coucou: say hi to nature' workshop. I explained to them that it was an activity with tempera aimed at making a shelter for birds that they could then observe nesting inside. The children's affirmative response started the workshop. I got everything I needed and we set a day to meet.

Gaia and Riccardo are respectively eight and four years old, so they represent an ideal sample for me relative to my target group, which is precisely children between four and eight years old. We are therefore talking about children old enough to be able to get Coucou's message and visualise the objective, but not too old to prefer other activities than simply colouring with tempera or being outdoors.

The main difference between this workshop simulation and the actual event lies in the fact that Gaia and Riccardo are siblings, so there is a relationship of acquaintance and complicity between them that leads them to behave differently to two children who do not know each other. This is a special aspect of the "Coucou: say hi to nature" workshop, because the decision to engage in such an activity was made not only to bring the youngest children closer to the animal world, but also to foster communication and friendship within city neighbourhoods, where indifference generally rules.

Another substantial difference lies in having only

been able to observe one pair of children. In the original version of the workshop there would be about twenty trios doing the activity, but due to the unavailability of other children I was only able to work with two.

This activity, besides being necessary to test the effectiveness of the workshop and its organisation, as well as my ability to communicate with the target audience, was also useful for observation with interaction. I carefully analysed how the two of them related to each other and to the proposed objects, also taking into account the time it took to produce a work that satisfied them. I decided to interact by asking questions because, being such young users, I was interested in breaking down the language barrier and the awkwardness of being in contact with an unknown adult like me.

The guestions I asked were of an emotional nature, asking if they were enjoying the activity or if they were annoved, I then asked on a preferential level their personal taste, so what was their favourite colour or tool to use. I then also asked on a design level what they wanted to draw and, after observing that they were still not completely comfortable, I decided to take an interest in their other daily activities, asking what they do at school or what their hobbies are, trying to give their answers empathetic cues for similarity. For example, to 'I'm in the squirrel section at school' I replied that when I was in kindergarten I was in the butterfly section instead. In this way they spontaneously told me other personal curiosities and felt appreciated.

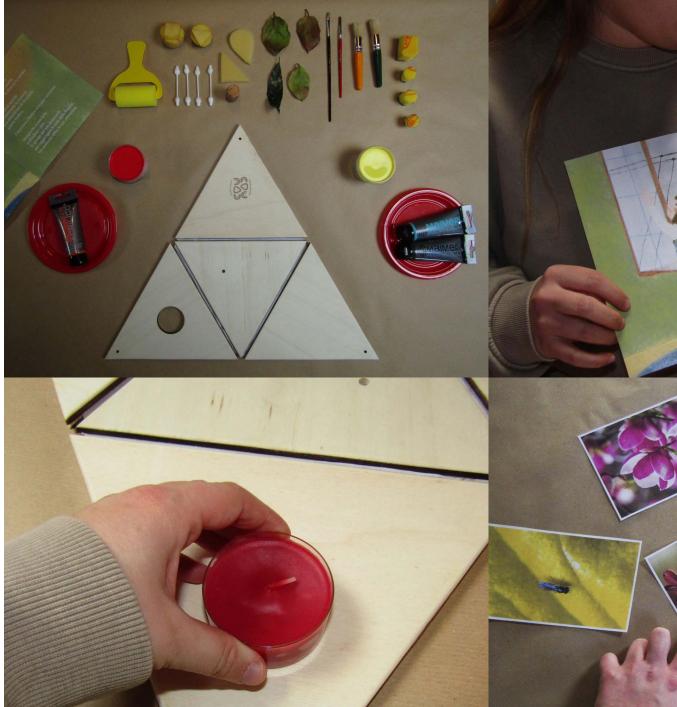
a.

I prepared the table that will host the workshop. Gaia and Riccardo are the ones who will take part in the activity, ages eight and four, respectively. I wanted to place the painting tools neatly to give the children a chance to consider all the options before choosing one. The various varnishes are located on either side of Coucou so as to encourage collaboration and asking for help in reaching a particular color.

b.

I placed and secured a cover to prevent the coloring of the product logo. Children should color around the cover and consequently train fine motor skills in order to pay attention to the details. They will need to choose the right tools to be able to reach the perimeter of the cover.

146



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C.

Once Gaia and Riccardo arrived, I began to introduce them to the story of the coinquilino a-lato. I told the fable by showing them clearly the pictures, stopping to ask them a few questions in order to engage them, and emphasizing the emotions that Margherita, the main character, feels during the story. The fable was needed to communicate with the kids, in a language they could understand, what's the purpose of the workshop and the importance of the animals in their life.

147

d.

I then proceeded to explain why the colour palette was chosen, sharing why choices are made is crucial for the child to learn. I talked about which the birds' favourite foods are, among which there are also many insects. So the colour palette is made up of the shades of berries and flowers they prefer and bright colours that attract insects they love to eat.

e.

Once I finished telling the story, I informed the kids that now it would be their turn to make a birdbox, like Margherita did. Gaia and Riccardo responded with much enthusiasm and curiosity. After presenting them with all the tools at their disposal, including their hands, they began the activity.



g.

As new tools were discovered, new patterns began to appear on Coucou. During the activity I was asking what they were drawing and emphasizing the graphic outcomes produced by different tools. This modus operandi was effective. The kids listened to my observations and were able to figure out which tool to use to achieve the desired outcome.

h.

Orange was Riccardo's favorite color, in fact it soon ended. I decided to show him how it is made. First I asked if anyone knew how to create orange with the colors we already had on the table. No one could answer me, so I proceeded to pour some red and yellow into the plate and asked who wanted to mix them together. Riccardo raised his hand first so he did it, he felt so proud and cheerful.

i.

The paint roller has been one of the most unsuccessful tools. It was used by Riccardo as a method of erasing all previous drawings. I observed how this was not productive to the purposes of the project and frustrating to Gaia. The kids already know each other, therefore this was a particular situation for which using the paint roller represented spite, so I had to collect it.

Since the conformation of the paint containers al-

of the paint containers allowed it, Gaia decided to use her fingers to paint Coucou. The goal was to make a flower with red petals and a yellow pistil. In this case, Riccardo also started using his own hands, but preferring to "stamp" his own handprint on the wood.



m.

Given Riccardo's insistence on "ruining" the boards painted by Gaia, the child decided to divide them up so that each person would be responsible for painting their own. Using a toothpick to write their names to mark the ownership, Gaia also valued the layers of paint underneath, repeatedly covered by Riccardo, as they could now be glimpsed and create rainbow lettering.

n.

At the end of the activity, the workbench was fully dirty. That allowed the the sides of Coucou to be coloured as well as to test the use of the various tools.

The children went to wash their hands thoroughly, insisting on asking when they would be able to admire Coucou in standing outdoor and becoming a birdbox.



I covered a table with wrapping paper in order to delimit the area available to them and allow them to express their creativity with wider boundaries than Coucou, thus giving them total freedom in their work.

I decided to provide the children with twelve different tools to paint Coucou, including their hands.

The tools were diversified according to various parameters: material, handle and drawn stroke. was to emphasise the sensory stimulation provided by touch with the manipulation of the tool. Attention to the grip is also crucial, especially since we are dealing with profoundly different users in terms of fine motor skills. Finally, the decision to also perform visual stimulation was necessary to generate awareness that different tools produce different traits. This was useful to allow users to be able to choose the tool that best suited their necessities and the design they had in mind.

Stencils made from potatoes

Q-tips for children



Pieces of foam of various sizes and shapes













Toothpicks

Paint roller

Paintbrushes with coarse tip, short and stubby handles

Paintbrushes with fine tip and long, thin handles Rounded pieces of sponge with one abrasive face



Rolled up paper towels

Leaves of different trees



POTATO-CRAVED STANCILS

Two stencils carved from a potato have been proposed. This fairly common technique makes it possible to create excellent natural stencils that can then be conveniently thrown away without leaving any residue. Each half of the potato can serve as a mould, simply carve it as you like.

In this case, I made one mould in the shape of a triangle and one in the shape of a rectangle. This resulted in two similar moulds, therefore with the same characteristics to the touch, but two different visual outcomes.

The grip you get on this type of stencil is primal, so it is perfectly suitable for even the smallest users.

CORK STOPPER

The cork stopper is a waste element that can be used again in this way.

This tool can be employed for painting in different ways: using the base as a mould or rotating the body like a roller. The children used both methods during the workshop and were thus able to train their manual dexterity and creativity in discovering new functions of the object.

Obviously, the stroke that is produced is also different. With the mould function you get heterogeneous circles, while with the roller function you have an inconsistent tract because the cork cannot be completely impregnated with paint.





Q-TIPS FOR CHILDREN

The children's q-tip has a mushroom shape, which is necessary in order to guarantee safety while using it, which must not risk being pushed too deep into the ear by the still inexperienced user.

Obviously this is a very unsustainable tool because it is disposable.

This shape, which is present on both ends, is very interesting to be able to easly create details of one's project, to reach inlets or to remove excess paint from the surface.

TOOTHPICKS

14

The toothpick, like the q-tip, is also unsustainable to use because it is disposable, but it is also just made out of wood, which, at the very least, avoids its disassembly during discarding.

The toothpick is used to remove product and allows very fine and delicate strokes, it therefore works by subtraction, so it is not very capable of transferring paint on a surface.

The toothpick allows a very prevaricating grip because it is extremely thin and short, it would be good to replace it with a skewer toothpick so as to maintain its particular stroke while improving its grip and imitate the one of a pencil.





PAINT ROLLER

The paint roller was a very interesting tool. It made it possible to step into the shoes of a real painter and thus stimulate role-play.

It is a purchased object that is well known to children who have coloured before. In this case, they come into contact with two new materials: plastic and sponge, as well as a different type of handle and movement. Whereas with the previous tools the user had to move their arm vertically to impress the mould, now it is only necessary to move their arm away and closer to the body to create the stroke. This is a very different movement from the one of the cork used as a roller because that was guided by a single finger, as it did not have a handle, whereas the paint roller is specifically designed for its role and therefore it has an easier grip because of its handle.

The paint roller allows for a very homogenous and voluminous stroke, which is why it was a trouble during the workshop.

BARE HANDS

The kids were allowed to use their bare hands as a method of painting. Finger painting is an established technique at school level and therefore well known by children.

It is an excellent alternative that produces no waste and allows the user to be in direct contact with the material. Finger painting is the apotheosis of sensory experience for the child because he can touch both the material that has to be coloured and also the texture of the paint, whereas by using a tool, one has contact almost only with it.

The fingers themselves can be used as stencils to create ovals and from them make flowers, trees or other ideas. The hands can be outlined to make a hand in your design or use the hand shape as a base to create a turkey, for example.

To encourage children to use this technique, it is a good idea to place the paint in a dish that is enough wide and low so that the paint can be easily picked up with their whole hand.





SHAPES OF FOAM

Children were also given foam sponges. Shapes I decided on were made from a sheet of foam rubber. I thought it would be useful to let them experiment with canonical shapes such as the rectangle and triangle, but also more unusual shapes such as the drop. It goes to recall the streamlined shape of the brush and is an interesting tool since it has both a round belly and an edge, useful for spreading the paint widely and for devoting to details, respectively.

Again, the tools could be used in so many different ways. First, as simple sponges, then to leave a trace by "tapping" on the work board, blurring the trace to make its boundaries less sharp. Later I noticed how, especially in the case of the triangle, children also loved to use it as a stencil, without repeatedly tapping, but concentrating the drafting of color in one press.

The stroke released is quite even and layered, so it can be repainted and made more even without loading the piece with paint..



FOAM WITH ABRASIVE FACE

These foam cylinders were made from a dish sponge. It was decided to set a circular shape because it had not been addressed with foam previously. The choice to use a dish sponge lies precisely in wanting to take advantage of the abrasive texture on its backside.

On the soft side we have the same behavior seen on the facing page: tapping to siffuse a light layer of paint. While on the abrasive side a textured trace is conveyed, useful for making snow, a flower meadow, a swarm of bees, in short, anything that can be reduced to a small group of polka dots. It could well be employed to make a painting along the lines of pointillism. In fact, the abrasive part makes it possible to print small spots of paint close together and create a polka dot pattern, more or less dense depending on where and how you stamp the sponge on the drawing board.





PAINTBRUSH WITH COARSE TIP

The coarse-tipped brush is a multi-material tool. The thick, short handle is made of coloured wood, while the bristles are synthetic, bound to the handle by a metal clamp.

The paintbrush is certainly one of the oldest drawing tools, but in this case we are dealing with a peculiar type. The characteristics of the handle indicate that it is more appropriate for a child with not yet fully developed fine motor skills. The handle is not as short as that of the stencil carved

from a potato, but of medium length. This indicates that it is perfect for all those users who are learning the correct grip, but are not yet fully capable and therefore grip with their fist. It is therefore an excellent intermediate brush.

At the tactile level you certainly come into contact with many materials and therefore there is sensory stimulation.

While on the trace level there is an even spreading of the product with a fairly thick trail of about 15 mm. It can be used both for brushing on the board and for dabbing.

PAINTBRUSH WITH FINE TIP

The brush with its fine bristles and long, thin handle allows greater control of the stroke. It is suitable for those who can comfortably grip the brush between their index finger, just as they can when writing or drawing, which of course does not prevent it from being used by younger children, who can use this tool to practise the correct grip. In this case we have two specimens: one with a longer handle and one with a shorter handle, which gradually become more or less useful for learning and correct gripping.

> Visually, the results are the same as with the brush on the right, only the stroke is less wide, in the case of the panels in question, a maximum stroke width of half a centimetre.

On a tactile level the characteristics and qualities are the same as for the fist grip brushes in that you have the usual trio of materials.





LEAF

Leaves were chosen as a natural element that is present almost all year round.

hey are a generally recognisable tool for children who have already tried to use them in drawing at school. In fact, the technique of placing the leaf under a sheet of paper and tracing its veins with a wax crayon is very common.

In this case, the leaf could be used either with a brush, i.e. by dipping it into the paint and using it to lay it on Coucou, or as a mould, i.e. by dipping the whole leaf into the paint and then pressing it on Coucou so as to print the veins. Finally, another technique is to use the leaf as if to draw the outline, then hold the leaf still with your fingers and brush over it so as to draw the area by subtraction.

On a sensory level, there is a direct relationship with nature and its textures and it is a tool that allows for different outcomes, hence different strokes, a very interesting phenomenon for children to observe so that they can understand the multiplicity of functions of the same object.



ROLLED UP PAPER TOWEL

Painting with sheets of paper towels is a lot of fun. The child's hand supports the paper with a gripper grip that allows them to turn their whole hand into a kind of paintbrush. This is particularly interesting from the point of view of manipulation as it is very profitable to be able to use the hands in a thousand different ways and observe the consequences.

The stroke that is made with this tool is abstract, it will be very difficult to engage in details. It is optimal for making clouds or filling a meadow with blades of grass. Many close specks of paint are left behind, giving almost the effect of millions of dyes. After all, the movement is just that: you dip the blotting paper into the paint by pressing it inside the container and then there you press it onto the wooden board.



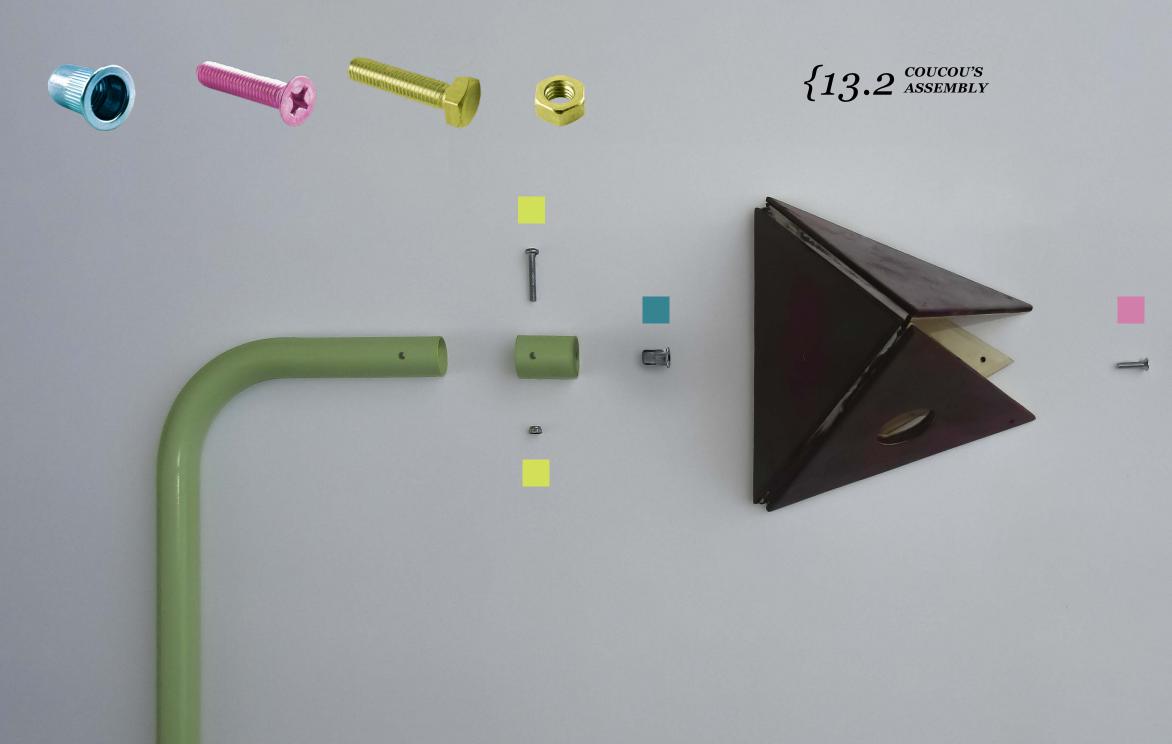




how does COU cou work











a.

Insert the link on the pole, taking care to match the holes.

Pass the through screw through the holes.

Securely anchor the CUOCOU pole to the chosen bollard.



Insert the blind rivet nut into its hole

C.

Using a spanner, tighten the nut on the screw so that the link is firmly joined to the pole.



Open the brooding chamber and align its hole with the blind rivet nut.

g.

Using a screwdriver, tighten the flat-head screw so that the brooding chamber is firmly attached to the post.

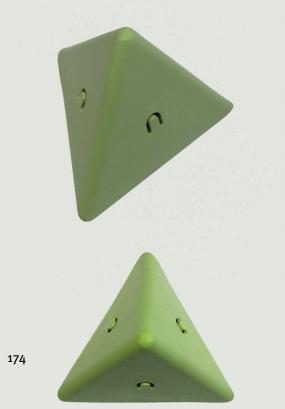
h.

Close the brooding chamber and insert the tip until the snap fits are in place.



{13.3 HOW TO INSTALL COUCOU?









BOTTOM VIEW



Coucou's tip has the task of holding together the three sides of the pyramid that makes up the nest. It therefore plays a central role in the creation of the artificial bird habitat. It connects to the three boards by means of semi-spherical snap fits that sit in three holes. Each board has a 4 mm hole in one corner of the triangle, the one whose sides are not adjacent to the base; it is here that the snap fits will fit.

The shape of the tip is obviously pyramid-shaped as it is intended to 'hug' the tip of the pyramid and emphasise the indicator function.

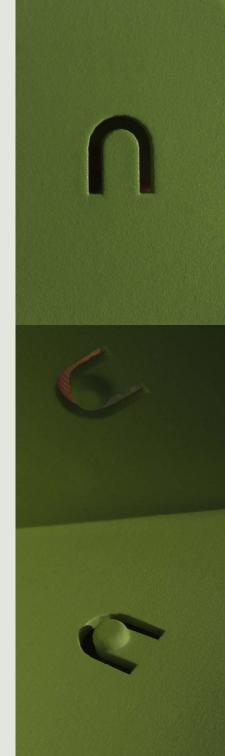
The snap fit is realised with a perimeter cut extending 8 mm so that the part can be easily flexed during assembly. In fact, the snap fit must flex outwards during assembly to allow the insertion of the toe on the nest. it will then return to its initial position when the snap fit has found its designated hole.

The component is made of ABS plastic by injection moulding with a constant thickness of 2 mm. It was decided to rely on ABS because it is an amorphous polymer produced by emulsion or mass polymerisation of acrylonitrile and styrene in the presence of polybutadiene. The most important properties of ABS are impact resistance and toughness.

Creep is also a valuable quality of ABS. For the conformation of the tip, it was necessary to have a material that, with proper design, was able to flex. This requirement is essential to realise the snap fits that hold the various faces of the hatching chamber firmly together. The fact that ABS is a plastic is also crucial for its outdoor application, as it resists weathering and is not prone to corrosion.

It is painted the same colour as the pole so as to give continuity to the product and consolidate its arrow shape, which is necessary to meet many of the design objectives.







COUCOU's support pole is not only a dunctional component to place the brooding chamber at an optimal height and entice birds to choose it as the base for their nest. It also has a conceptual function. It has the task of pointing, suggesting direction, just like the body of an arrow. With the addition of the brooding chamber and tip the call to the theme of direction is much more obvious, but if the pole had simply been an extrusion without bending it would not have communicated equally effectively.

The vertical part of the component can be straight or wavy. In the second case, this is designed to overcome the problem that many bollards have. Depending on their shape and size, they can be more or eno protruding. Some also have a ring at the top that goes to interfere with the correct vertical positioning of COUCOU. In fact it should be anchored perpendicular to the terrono so that all its functions are performed correctly. By proposing a small "deflection" of the pole this problem is almost entirely solved.

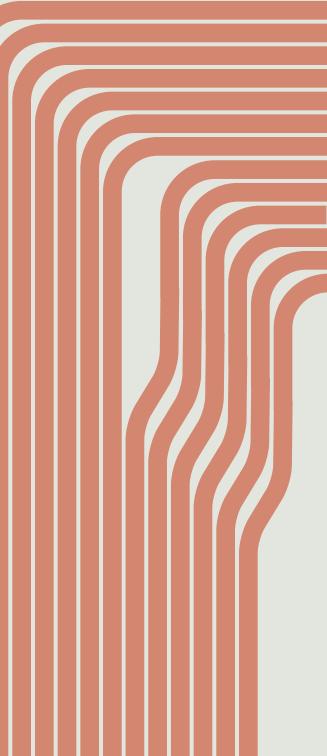
The pole is simply a hollow metal tube with two foci drilled toward the shorter end, so as to allow proper anchoring of the link that will close the end. Then the pole is simply manufactured by extrusion and drilling.

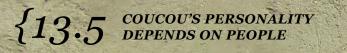
Poles are generally 2 meters high, so that they can reach a final height of about 2.5 meters and promote proper settlement of birdlife, which clearly prefers dens placed high up also to escape

certain predators.













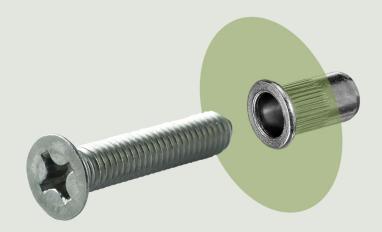


{13.6 THE LINK: TECHNICAL DETAILS AND HOW IT IS MADE

The link is the most important structural part of the project. It has the task of connecting the brooding chamber with the pole. Its role is decisive because, should it fail, the chamber would fall to the ground, leading not only to the decomposition of the nest, but also to the probable death of the birds inside. It could also injure a birdwatcher or those who are birdwatching.

The link is a painted and deep-drawn stainless steel cylinder 2 mm thick, 50 mm long and 33 mm od diameter wide. Two parallel holes of 6 mm diameter are drilled along its sides. These will be needed to anchor the link to the pole by means of a bolted through bolt, also made of stainless steel.

On the solid base of the cylinder is a 7 mm hole, into which the blind rivet nut will be inserted. The nut is required to allow the wood screw to find its place. It is a kind of thimble threaded on the inside, which allows the screw to be screwed in, which would otherwise remain unsupported inside the link. As the screw is tightened, the nut is compressed on itself by the screwing force. This creates a strong counterweight against the screw head, which ensures that it remains firm even under load. This is made possible by the presence of a lateral knurl, which flexes during tightening and creates the compression bend. During the rotational movement of the screwing, the nut does not rotate with the screw precisely because of the presence of the knurling which dampens the movement and flexes.









{13.7 THE BROODING CHAMBER: TECHNICAL DETAILS AND HOW IT IS MADE

The brooding chamber is the most important part of COUCOU. It is the one that attracts the birds who, if they find it suitable for their needs, will nest in it for the season. Consequently, it has been designed with all due care to be in line with the requirements of the birds.

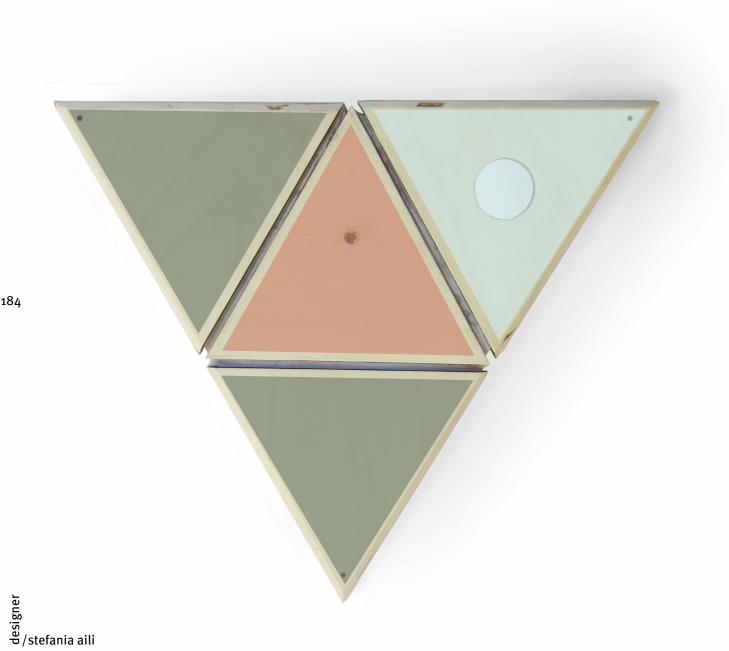
It has a special shape for a bird box; it is in fact a bird pyramid. The equilateral pyramid with a triangular base is a Platonic solid. This term is synonymous with regular solid and regular convex polyhedron, and denotes a convex polyhedron that has congruent (i.e. exactly overlapping) regular polygons for faces and that has all equivalent edges and vertices.

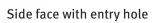
Each face is then cut from two 9 mm thick sheets of FSC plywood, which are then installed with non-toxic adhesive. Thus, each triangle has a final thickness of 18 mm. The gluing is specific to facilitate the folding and composition of the pyramid.

Each face is an equilateral triangle 250 x 250 mm in size. By means of laser cutting, it is possible to cut the entry hole, anchor hole and snap fit holes in a single pass. This is followed by sanding to chamfer the two sides adjacent to the snap fit positioning hole. An inclined angle of 30° is obtained, which will allow the faces of the pyramid to fit together perfectly despite their thicknesses.

designer designer /stefania aili









Base face with hole for link connection



Basic side face without spe-cific function

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185

{13.8 THE CHAMFERS: TECHNICAL DETAILS AND HOW THEY ARE MADE

The edges of COUCOU are the three ligaments that join the base face of the pyramid with the side faces. In order to allow the hatching chamber

to open fully 180°, it was decided to make these movable joints with some waterproof and water-repellent fabric, a waste from the textile industry, thus a sustainable and recycled product.

This type of material is made on a cotton base with a polyurethane foil coated on it.

Chamfers play a key role for COUCOU, so their material was carefully chosen, with special attention to the effects of weathe-

ring on the latter. It is a material that adapts perfectly to the outdoor environment precisely because it is "enhanced" by the polyurethane foil.

It is essential that the brooding chamber can be opened comfortably, but it is even more important that the opening is complete, so that it can be laid on the table and devoted to its decoration during the workshop. This expedient facilitates the activity of children who wish to participate, allowing them to focus on their own idea and developing creativity, rather than engineering how to paint a pyramid in 3d. Not displaying COUCOU comporto is also particularly important; you have more of a "blank sheet" on which to work free of structural or concep-

tual constraints.

Each chamfer is visible for about 10 mm on each side of the base triangle.

The fabric is actually hexagonal in shape and is glued with a non-toxic, outdoor-friendly glue between the two halves of the base triangle. It obviously has a circular hole in the center to allow the hole for anchoring the brooding chamber to the link to function smoothly.





Glossy, transparent water-based acrylic enamel, non-toxic and suitable for prolonged outdoor use

Water-formulated acrylic paint for exterior use

188

FSC-certified plywood

Non-toxic glue suitable for textiles and wood for outdoor use

Water-repellent waterproof fabric made on a cotton base coated with a polyurethane foil, recycled by the textile industry

GLUE BONDING CREATES THE {13.9 **PYRAMID**

In the illustration opposite, you can see how the basic face of the brood chamber is made, the one that holds all the other faces together. From it branch the chamfers, then the corners that hold the side faces together.

Each face of the pyramid is divided into two 9 mm plywood panels, and the chamfer joints are created between them.

To make them, glue is applied to the back of the first panel, the one that will remain facing inwards in the hatching chamber and untreated. then the

After allowing the glue to act under a press to encourage proper bonding over the entire triangle area, COUCOU can be decorated. it is at this moment that the in-house fabrication phase ends and the neighbourhood workshop begins. The decoration is entrusted to the children taking part in the workshop. It is done with non-toxic paints suitable for outdoors.

NSIDE

THE HATCHING CHAMBER

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chamfer is applied and the waterproof fabric is laid. It has a hexagonal shape because obviously part of it must also be inserted between the side panels, so as to join them with the base.

The adhesive is applied, taking care to leave about 10 mm of space between the base and side faces. This is a real chamfer, as this space without glue will be the very one that will be exposed to the elements and will be moved to open and close the hatching chamber so that COUCOU can be dismantled. Of course, glue is also spread between the second plywood panel and the other side of the fabric.

As soon as the paint is dry,

a light sanding of any smudges will be carried out, especially if on the entrance hole. The designs are then sealed with a transparent, non-toxic polish for outdoor use.

In this way COUCOU is ready to be used throughout the breeding season by its new tenants.

189

$\{13.10 \text{ how to install } \\ \text{couocu as a } \\ \text{parasite?} \}$

Removable and flexible road bollards belong to the category of parking or parking bollards, in that they are devices designed to prevent vehicles from parking illegally in certain areas.

Their main function is to prevent parking in front of gates, gates or near driveways. They can also be used to delimit other areas, such as pedestrian areas, green areas or private roads and spaces.

In fact, even private citizens can, on request, install bollards to delimit property spaces.

It is therefore necessary to differentiate the cases in which a public body, such as the municipality, installs the bollards from cases in which the administration intervenes at the request of the private citizen for its total and exclusive benefit.

Remember that if you have to delimit a private road but of public use, i.e. in co-ownership, you will need to enter into an agreement with the other owners.

The method of attaching COUCOU to the dividing posts is by means of a metal band, or, for greater strength, by means of special joints with a burglar-proof screw. The clamp is the preferred method as it is universal and easily removable when needed.





HOW DOES COUCOU SPEND THE {13.11 WINTER?

When temperatures start to drop and nesting birds migrate to warmer areas, it is time to uninstall COUCOU. The product will remain in use for the birds until they leave the nest in the low temperatures, no precise date can be set, also because of the climate change that is taking its course. We can generalise by saying that COUCOU will be used for a period from April to October, but these six months with warm and mild temperatures could soon become seven or eight.

When the breeding season draws to an end and birds start to leave the city to spend the winter elsewhere, COUCOU can be uninstalled and cleaned.

In order to do this, it is advisable to carefully observe whether the nest is actually empty; there may be anomalies whereby the nest is also maintained in winter or a later departure of the bird family. If you are not sure whether the house is occupied or not, tap gently on the sides or roof and listen for scuffling or reactive cheeps, or peek inside the house carefully through the roof or movable side to check for birds. Ensuring that, to be on the safe side, the nest is empty can also be carried out under the supervision of an ornithologist.

Once it has been confirmed that the family has left the nest, COUCOU can be dismantled.

It is needed to clean COUCOU during the winter season. Just like a dirty and damaged bird feeder, a dirty bird box is less attractive to backyard birds.

Dirty bird boxes can also harbour rodents, insects, feather mites, fungi and bacteria that can spread diseases to nesting birds and vulnerable young birds. Cleaning a birdhouse minimises

After unscrewing the screw and de-

taching the hatching chamber, it is

time to clean it. It must be opened

completely and all nest debris must

be removed thoroughly, expecially

faeces or clumped matter. Which

are meant to be discarded in plastic

chess to prevent the proliferation

of bacteria.

It is then important to wash the untreated interior wood with neutral soap and lukewarm water to sanitise it. then leave it to air dry to ensure there will be no wet spots that would encourage the formation of mould. Be sure to scrub all corners. inlet, tissues chamfers, drainage and ventilation slots to remove all debris and contamination.

With the help of a ladder or a lift, one approaches the hatching chamber and extracts the tip.

The three side faces of the chamber will open, so it is important to support the bottom one expecially.

Take twigs, moss or straw used by the birds to create the nest out and throw it away.





summer.

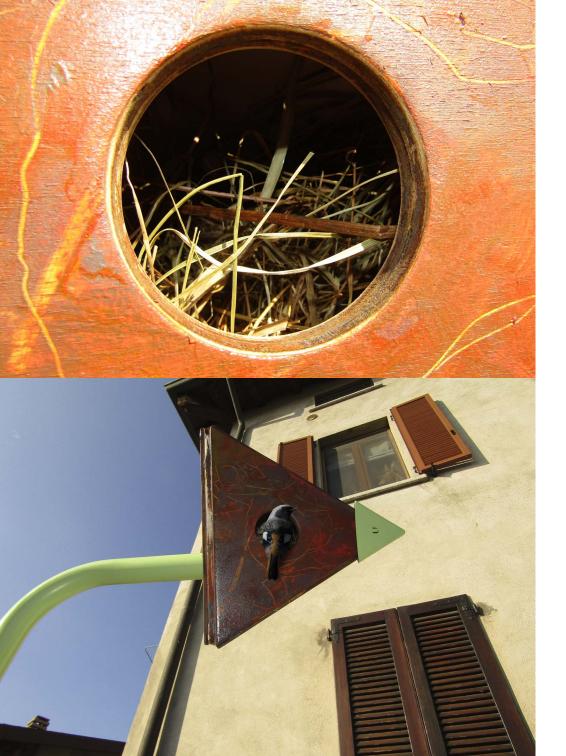
these risks and makes the box more attractive to nesting birds. A clean box encourages reuse with the same bird family or other birds looking for suitable nesting sites at different times of the

Once COUCOU has been cleaned, it can be reassembled in the same position for the winter. In this case the brooding chamber will not host any broods, but the dry shelter could be used by the winter birds as a perch.



To finish, the exterior walls must be sanded down, the previous drawings removed and the boards prepared for the following year's workshop, so that COUCOU can be reused.





{13.12 **USEFUL DETAILS TO CARE ABOUT**

How does COUCOU perform in contact with the elements? At the level of strength, durability and material performance, there is no doubt: COU-COU is designed to last and also be reused from year to year.

In terms of animal welfare, all the necessary precautions have been taken to make COU-COU an ideal habitat for target city birdlife, perfect for being chosen as a home for the season and laying eggs.

As visible in the figure, the entrance for the hatching chamber is located at the bottom of the pyramid, on a face sloping 30° downward. This provides protected and sheltered access from the COUCOU shape itself. The "inverted triangle" position is therefore not accidental, but necessary to promote both shelter from the beating sun and from rainfall. In the remote event that water were to enter the hatching chamber, it would be "slid" toward the exit from the downward sloping bottom edge.

Inside the hatching chamber you have enough space to accommodate a pair of Redstarts and their possible young. The angle at the bottom of the pyramid is 60°, which aids nest construction by "hugging" and compacting it.

In addition to these structural accouterments, COUCOU is also thermally insulating thanks to its FSC plywood walls a full 18 mm thick and corners made of water-repellent fabric, there is little room for drafts other than those to allow any rainwater to drain to the outlet.

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197