# Let's Open Cities for Us - LOCUS

Erasmus Intensive Programme 2008- 2010



Edited by Marta Bordas Eddy



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For those who are no longer here but always accompany me

For Carlos, my dear brother For Jordi, my stolen love For Laia, with whom I still have imaginary conversations

The loss has become my little treasure, which nobody can take away from me

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To Joel, T'es...

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# Marta Bordas Architect Ph. D. Candidate LOCUS IP Coordinator

Escola Tècnica Superior d'Arquitectura del Vallès de la Universitat Politècnica de Catalunya, Spain



### Once upon a time...

I decided to become an architect at age 16. Not because it was my innate vocation, but because I had a car accident that left me with a spinal cord injury, completely paralyzed from my thoracic diaphragm down. In such new situation, in need of a wheelchair to carry on with my life, I realized that I couldn't go to most of the places I used to go without help. Thus, I naively thought: 'If the world is not prepared for the "new me", I must learn how to change it!' And this is why I decided to study Architecture: to learn how to eliminate architectural barriers.

I carried out my studies, and the truth is that I became disappointed with the trivial importance given to accessibility, without even a single subject aimed at teaching diversity and 'design for all'. I realized how little was known about the topic and all the taboos that arise when dealing with someone who is not 'standard'. What does it mean to be 'unlike the rest' and how do 'normal people' comprehend it? Disability is in the eye of the beholder or, in other words, disability is the perception of the outside world and not necessarily how a 'somehow-impaired' person sees him or herself. When I think of myself, for instance, I rarely consider myself as a disabled person and I am surprised when someone treats me as one (e.g., addressing questions to whoever is next to me instead of me directly, giving me compassionate looks in very ordinary situations, and a long etcetera of examples accumulated from nearly 15 years of mobility impairment). I suppose that a wheelchair is stuck inextricably to my rear, but not to my mind. Yet everyone else will inevitably see it as forming a part of my body and often will automatically associate the ideas: wheelchair, handicapped, helpless...

Perhaps the error can be found in the etymology and evolution of the commonly used expressions: the term 'invalid' (not valid?) became obsolete already a long time ago, so largely disapproved that it is not even possible to find this particular meaning in some dictionaries. The same has happened with other similar lexical constructions in Latin languages, such as the Spanish 'minusválido', where the prefix 'minus-' denotes 'less' (less

valid than whom or for what?) and which has also become an out-dated term according to some authorities. Although being terms institutionally rejected, the general population still uses them more often than not. It is a fact that, in many parts of the world, there are still deep and persistent negative stereotypes and prejudices against persons with certain conditions and differences; we only have to observe the language commonly used to refer to people with disabilities - which has played a significant role in the persistence of negative stereotypes - such as 'crippled', 'lame' or 'retarded'. Instead, the expression 'person with a disability' is broadly accepted nowadays. Still, within the word 'disability', it would indeed be very helpful to understand that the prefix 'dis-', added to the front of the word to express negation, is imposed by the external environment, while 'ability' is inherent to each person: the skill is latent and only needs the appropriate conditions to emerge. De la mateixa manera que si em poso a escriure en català, només aquells que dominen l'idioma tindran la capacitat d'entendre'm, i no pas la resta. Here, I was saying that just in the same way that if I start writing in a different language (Catalan, in this case), only those familiar with it will be able to understand, while the rest will not. Obviously, this does not mean that those not capable of understanding the previous sentence in Catalan, do not have comprehension capabilities at all, but they could not perform this specific activity (reading Catalan) because my text (or the built environment, if referring back to the topic being discussed) was not properly designed. In the words of one of Albert Einstein's famous quotes: 'Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.'

However, I believe that the term 'disabled' still holds some negative connotations, but probably because we still understand it as a synonym of the ancient ones (not valid, less valid, lame, etc.). What is basic here is to understand the real meaning of disability, which, under my understanding, is not the definition found in most dictionaries: 'A physical or mental condition that limits a person's movements, senses, or activities' (Oxford Dictionaries); but as it was defined in 2007 by the Secretariat for the Convention on the Rights of Persons with Disabilities (SCRPD) of the United Nations: 'Disability should be seen as the result of the interaction between a person and his or her environment.' Since I am a wheelchair user, one of the indirect benefits has been to make everyone aware that, on so many occasions, people with special needs feel disabled because of the environment and not their own capacities. For instance, I loathe 'feeling disabled' when the environment is not properly designed for a person in a sitting position on wheels such as me, when I cannot reach a destination and perform an activity -not because I am incapable, but because there is no access. To state it clearly and simply: I feel fully able (or 'valid') in a non-hostile environment, where there are no stairs, elements at unreachable heights, or furniture with no legroom whatsoever. In my house, for instance, where I have designed everything according to my needs and where I do not have any problem in performing any task, I am not disabled at any moment. (And more importantly: it looks like a normal house! People cannot tell that a wheelchair user lives there if they don't know beforehand. I will return to this fundamental concept later on.)

It is important to be aware, as well, that people with impairments are at a disadvantage not only because of architectural barriers, but also because of cultural barriers. I still remember painful answers given by some professors during my first years of studies, such as, 'It is just an exercise, it doesn't have to be accessible.' These answers were transformed over the years, as my knowledge and personality grew, into: 'Alright, I'll teach you how to solve this constructive detail so that it's accessible, but don't tell the rest of the class, because the standard solution is the "normal" one'. Listening to these kinds of explanations

made me angry, frustrated and exasperated. Nevertheless, it also made me realize that it was necessary to ask unwelcome questions and to experience awkward situations, especially in the context of teaching architecture, in order to break widespread taboos and to not let the 'world of the disabled' fall into oblivion. On many occasions. I have seen how designs were not made accessible due to ignorance and not for lack of will. As a matter of fact, I became aware of the value of my being a wheelchair student and sharing experiences with future architects when my schoolmates showed an interest in solving their projects with an eye toward accessibility. They sought me out for advice, some of them even overcoming a fear of contracting some kind of contagious, wheelchair-sitting disability. (It sounds as if I am kidding, but I've definitely been asked that more than once!). As it turned out, they have enjoyed getting familiar with the wheelchair, having fun with it, trying to overcome steps or other similar obstacles and, overall, learning that architectural barriers are so annoying on the one hand and so easily dispensable on the other. Later in my academic career, in fact. I learned that there has been research which asserts that being teaching architectural design in a way that promotes the active participation of users with disabilities, student sensitivity will increase and future professionals will gain a deeper understanding of the spectrum of users' special needs. I do not doubt it at all.

When I was about to finish my degree studies, the Schindler Award fortunately crossed my path. It is a biennial European competition which challenges architecture students to place accessibility and inclusive environments at the centre of the design philosophy. At that time, I was quite excited to find out such an international event concerned with accessible design, so I decided to participate. The competition ran under the name 'Schindler Award for Architecture 2005/2006 "Access for All", and I became one of the 5 finalists chosen from about 60 European schools of architecture. It is worth noting that the great achievement of the Schindler Award (in my opinion) is that it not only inspires architecture students, but -- more importantly -- it provides financial incentives to schools of architecture by awarding the winner's school a prize that is five times the amount given to the winning student (or group of students). I believe that by getting schools to commit and engage, long-term success is assured because entire classrooms of students will participate rather than sporadic individuals who concern themselves with the subject, probably for personal reasons. Furthermore, generations of students will take part in the competition every two years, quaranteeing that lectures, seminars or workshops on the topic of accessibility are offered to the scholars, as the Schindler Award rules demand.

Having been selected as a finalist and taking part in the Award Ceremony held at the KKL Luzern (Switzerland), I was provided with the opportunity to meet inspiring people who work in the field of accessibility. What is more, the experience opened doors in my home University as well, and this is how my academic involvement in teaching and researching 'design for all' began. Together with Prof. Miguel Usandizaga, my tutor back then and my current PhD supervisor, we ideated the Intensive Programme LOCUS – 'Let's Open Cities for Us' as an Erasmus intensive activity, which brought together several European schools of architecture with the common objective of teaching accessibility and researching inclusive urbanism for historic sites. Most of the partners met at either the aforementioned or subsequent Schindler Award ceremonies.

LOCUS IP was originally conceived as a means to incorporate 'design for all' into education, which many architecture schools lack in their curricula. Too often, school study plans are very rigid and strict, and there is little room for new topics and necessary renewed approaches, such as today's unavoidable questions of inclusive design. By op-

ting for an Erasmus format, as LOCUS IP does, schools are free to introduce innovative proposals into their teaching methodology. Further, it confers the opportunity for various nationalities to work together and provide their own, different views and input to the topic of universal design. The added value this entails is self-evident. On the other hand, the weakness of the Erasmus format is that only a few students can participate, and that it can only be held once a year during a maximum of three consecutive years. This means that barely five selected pupils from each school, per year, can take advantage of such an initiative, but not a full class which would be the ideal.

Nevertheless, we qualify the experience as a success. All the participating professors have shown commitment in their respective schools enthusiastically, such that our French colleagues from Montpellier have taken the baton for the next three years with a renewed proposal for the programme, now named LOTUS – 'Let's Open Tourism for Us' (2011-2013). This is a continuation of LOCUS IP, which began in 2008 and concluded in 2010. The idea is that every three years one of the partner institutions will assume leadership, or even two partners simultaneously, which will facilitate an increase in the number of participating countries. We have already found new, potential partners interested in taking part in these 'design for all' topic workshops; thus, network of European Universities teaching inclusive design will be perpetuated and even expanded. In this sense, we believe that our aim of cultivating interest in inclusiveness for design is already set into motion, and that it will continue to disseminate across borders and into institutions until it has become fully integrated within the curricula of every architecture school.

The maximum guarantee of an inclusive society is the pursuit of accessible architecture, because everybody enjoys the same rights of access and participation. In the same way that the maximum guarantee of a sustainable architecture is the pursuit of accessible architecture, because architecture will only be sustainable if its utilization (therefore, its access) is permitted. Architects have the power to decide what buildings and cities are like; in other words, how we inhabit them. Therefore architects must be made aware of this power and that they have a responsibility to create the scenario for an inclusive society. Further, architects should think about how and why spaces affect individuals' moods, so that they can subsequently control the ambience they create. Spaces are not merely concepts; they are habitats where people move according to their individual aspirations and needs. As Juhani Pallasmaa often explains, his professor Aulis Blomstedt, teaching at Helsinki University of Technology in the 1960s, wisely taught this idea to his students using the following words: 'The ability to fantasize space and form is not the most important aspect of an architect's talent, but the ability to imagine the human condition.'

Last but not least, it is important to be aware that one of the original aims of architecture is to extend and enhance human capacities, as described in the highly recommended book *Architecture Inside Out*: from a tall tower we can see further over long distances, from a theatre we can all see and hear the performance together, or how steel structures and elevators allow a large number of people to work on a same place and make intensive use of resources, which increases sustainability. Thus, architecture must be designed according to the human being—its movements, needs and desires—to enlarge human potential; and it is fundamental to pay special attention to the diversity of human bodies if we want to avoid accusations of malpractice and discrimination. The ultimate goal is to improve the relationship between architecture and society: through accessible architecture, we can guarantee greater comfort for all users and, consequently, improved quality of life, profitability and sustainability.

To conclude, I would like to highlight once more the need for introducing diversity and inclusiveness concepts at every academic level, so that we may truly eliminate unnecessary differences and marginalization. While it is essential that we recognize and resolve the current lack of equal rights for all people, I foresee a time when we will properly educate the youth and engender an early concern for all members of society. When that time arrives, true inclusion will be achieved and there will be no need for manifestos such as this.

And we will live happily ever after.

### Miguel Usandizaga

Prof. Ph.D. Architect

Escola Tècnica Superior d'Arquitectura del Vallès de la Universitat Politècnica de Catalunya, Spain



### Learning about universal design. An experience.

'(T)here seems to be a general tendency of young, radical minds to emphasize form and abstraction whereas in their older age, architects tend to shift towards a more situational, material and emotive expression. Why this would be the case is an interesting psychological topic itself'

Juhani Pallasmaa [2007]

Aside from questioning 'why' this change occurs between younger and older architects, this observation raises another very interesting question as well: How is this transformation produced? As it is with all the other changes that we gradually suffer over the years; we don't get older, we continue being ourselves. Then one day, we see a policeman and we say to ourselves, 'But he's just a boy! How can he be allowed to carry a gun?' That is the day that we have taken a step toward old age.

It's the same when suddenly one day we begin to take interest in architectural barriers, in the cursed and secluded steps of a town square or the traffic signs at head height. Very often, that awareness stems from the need to assist a friend or a relative, a situation which becomes for us an 'eye opener', in the words of Bas Treffers, former vice-president of the European Disability Forum. That was the role Marta Bordas played when I met her in 2002, when she was a student in my History class at the School of Architecture in Sant Cugat del Vallès (Barcelona). She entered the class one day with dreadlocks and in a wheelchair, and when she noticed that she couldn't move from the last row because the classroom was built with terraced steps, she remained at the back until the lecture was over. And she never came back. She had felt discriminated against.

The following year, when we were organizing the last workshop for the Socrates intensive programme 'New forms of Housing in Abandoned Buildings', which was to be held in Oldenburg (Germany), Marta Bordas accepted one of the posts that was offered. I was as happy as I was concerned about that decision: I was glad that Marta Bordas could come with us, but I was also afraid that it would be too complicated. I had never travelled or lived with anyone in a wheelchair.

Naturally, the updates over the next few days weren't reassuring, and Marta's responses even less so. For example, when we were informed that the bathroom door was only 70 centimetres wide, she asked if the door could be removed from the hinges. 'What am I in for?' I thought.

But my fears were unfounded; everything turned out all right and without any problems. What's more, while we spoke with the others after the workshop about the pleasant working environment we had enjoyed, one of the professors—Sarantis Zafeiropoulos from Thessaloniki—observed (with his characteristic, philosophical wisdom) that our own problems and difficulties become diminished and seem silly when we see how Marta Bordas faces life with so much courage and humour.

The issues related to disability, as with ageing, are those that we don't want to speak or think about. My first reaction when I contemplated them—I have also seen this repeated in many other people's attitudes—was of fear. When you ask anyone to sit in a wheelchair, they look at you with concern, as if they're wondering, 'Wouldn't it be contagious?' The expression on their face is obvious: 'No way!', 'Me, on a wheelchair? No way!'

It's not just a lack of empathy that is the problem; it's not that we are unable to put ourselves in the other person's situation. The problem is that we refuse to even try it. Our fears make those situations and difficulties taboo, something that we care neither to speak nor think about. And this instinctive unconscious and fearful reaction motivates us to escape from them. Further, when we think of disabled people, what often comes to mind is that they must be very difficult to get on with, that they must always be in a bad mood and even angry with everybody else.

We never want to think about it. We have never been interested in imagining ourselves as elderly or disabled or sick. Yet, we do get older; and considering that such a future is imminent for all of us, it's better that we become aware of it and, most importantly, that we teach instil these ideas into future architects and cultivate their capacity for empathy when designing buildings or urban spaces. In this way, they won't think only about the appearance of their designs, but of the quality of people's lives who will inhabit those dwellings and use those urban spaces as well. In other words, they must imagine true life conditions and the needs of every type of person.

It's always difficult to understand other people's reasons and reactions. For example, Yordan Letchkov was an excellent Bulgarian football player, one who participated successfully in the 1994 world championship. However, he was 'follicularly challenged', as some might say, or 'bald', in the words of some other uninformed people. As I was watching that championship, one of the commentators continuously referred to Letchkov as 'the bald player'. I became angry at that; there wasn't any relationship between his hair and his actions; and there was certainly no reason to focus on his baldness, especially so persistently.

Until that day, I had never understood why it would bother people of colour to be called 'blacks'; but after watching that match, I suddenly understood it forever. You are black, bald or whatever you are, but it doesn't affect any other aspect of your life, personality or activity; and there's no reason why anybody should remind you of it. If you think about it, wouldn't it seem stupid for a journalist to insist on referring to Messi as the 'white player'?

I'm also bothered to be called bald as well. I prefer the word 'dishaired', which sounds more objective and respectful. Moreover, I'm not actually bald; I've got a few stray hairs. (On this subject, I would recommend reading Éloge des Chauves, by Philippe Eliakim [2006].) People don't seem to respect the diversity of bald people. If you think about it, nobody, even the densest ones among us, would dare to tease an amputee when meeting and greeting him. Yet, the 'dishaired' experience it constantly when the 'hairy' ones find it funny and insist on making us know it.

My eyes were opened while watching Letchkow play. I began to support the 'politically correct' language. Nevertheless, I don't want to argue about this; if there's anyone who prefers to be called one thing or another, he or she will have his or her own reasons and the easiest thing to do is pay attention. We are all part of a discriminated group—or so we believe—and nobody has the right to disrespect our feelings or even agitate them.

What minorities (blacks, left-handed people, blind, deaf; victims of spinal cord injuries) suffer is discrimination. They are denied the right to go to places where others can go, or to do things that others can do. I've used the expression 'She felt discriminated against' when referring to Marta Bordas, and I've used it expressly because that's what it is to exclude people with functional or perceptive impairments. Even obliging them to use services that are specifically provided for them is discrimination, like any other.

It's as unacceptable as any other form of discrimination. Providing buses for white and black people is as bad as having them for 'ordinary' and 'disabled'. There's not any valid reason to deny anyone the right to take any bus. (The situation with the 'dishaired' is not quite so serious, as we can go everywhere. But have you ever noticed that so few public buildings have specific places to leave the hats that we need to wear, due to the lack of hair protecting our heads?)



The discrimination problem is basically quantitative: How many people are there on one side or the other? What is the level of difficulty or limitation in using or accessing facilities by the individuals in each group? To confront those issues, there are only two solutions: Either ignore them, or accept them and try to create access for everybody.

The first of these attitudes involves being blind to the injustice and only thinking about ourselves (currently in perfect health) This solution is strictly selfish, and Schopenhauer [1818] already warned us that radical selfishness (forgetting the world and thinking only and always of 'ourselves', as if there weren't anything else) represents the kind of ideas that are found only in mental asylums and cannot be overcome with words, but with cold showers.

Reality exists, and so does the environment built around it, with all of its characteristics, its materials, its shapes, as well as its architectural barriers. To not 'abolish' those barriers is not only an injustice, but an error as well. There are insurmountable obstacles for certain minorities that the rest of population—for better or worse—can overcome. But if we can avoid creating those obstacles for minorities, the transformation would improve the quality of life for everybody.

We should start to put these words into practise and to educate future architects that good architecture is simply a nice place to inhabit, a place where we would like to live, and that good design creates a space which the maximum number of people find easy and pleasant to use.

Adolf Loos [1909] once wrote, 'The house has to please everyone, contrary to the work of art which does not'. Well, the same applies to chairs, buildings and squares. This thought focuses on creating a new way understanding of architecture and design which everybody likes and which excludes no one. The idea is known as 'universal design'.

Universal design isn't a synonym for 'orthopaedic design', or for ugly, or for the depressing environment of a hospital. What is ugly and depressing is the design which hasn't taken into account human diversity, which has been modified a posteriori with more or less ingenious technical devices that allow access for the elderly, blind or people with reduced mobility.





Left: Carlos Mourão, Apoio a Banhos de Mar, Lourinha, 2007

Right: Marta Bordas, Residental swimming pool, Cabrils, 2000

It's enough to look at projects carried out by architects like Marta Bordas or Carlos Mourão to understand that, when accessibility and conditions of use are designed from the beginning of the project, the final result is good. Universal design isn't sad or threatening; it's simply accessible, comfortable and easy to use. As Enrique Rovira Beleta, architect, paraplegic and accessibility expert, has commented: Adapted restrooms in public buildings are always occupied. Everybody prefers them because they are wide and you have enough room to leave your coat and/or your bag. What's more, you don't have to be a contortionist to lock the door.

Those who are interested in this concept of architectural design don't concern themselves with it to torment themselves. Quite the opposite. When Loos said [1908] while visiting a food fair, he was horrified to think about eating the 'dried cadavers of animals' that had been cooked with more or less the same aspect as when they were alive, he added: 'No, dear professor from the College of Applied Arts, I am not denying myself! To me, it tastes better this way. The dishes of the past centuries which used decoration to make the peacocks, pheasants and lobsters appear more appetizing produce the opposite effect on me. I look on such a culinary display with horror when I think of having to eat these stuffed animal corpses. I eat roast beef.' Well, when dealing with these issues I don't deny myself either: I work on accessibility and universal design because I enjoy myself. It gives me a kind of hope in a possible future and a better world, and it has already provided me with unforgettable experiences, sometimes truly funny ones.

I will only recall one of those funny situations that are frequently repeated. Once, it happened in Parc Güell (Barcelona), during an organized disability simulation session to make architecture students aware of accessibility problems; one of the wheel-chaired students fell down. There was an instinctive reaction by tourists: a dozen of them immediately ran to help him. (By the way, this is the so-called capacity for empathy: the ability to put ourselves into another person's shoes and, if we see him or her suffer, to help them.) At that moment, the student's reaction, also instinctive, was to stand up and brush the dust off his knees. The tourists nearly beat him to a pulp.

And why was there so much aggression toward that student who, after all, hadn't done anything bad? Something similar happened in a movie by Stan Laurel and Oliver Hardy: they were hidden in a war trench during a battle and when the war was over, Oliver went to visit Stan and you could see him sitting on a bench with only one of his legs. They chatted for a while and when they stood up Oliver discovered that Stan could stand on two legs, that he had been sitting down with one tucked under himself. Oliver wanted to beat him as well, but why? The correct assumption seems to be that Oliver and the above-mentioned tourists got angry because they had been 'lied to' by someone who seemed to suffer—which is why they wanted to assist him—and this wasn't the case. The suffering was simply a fiction.

Nobody can just assume that a youngster in a wheelchair who falls down is merely an architecture student simulating a disability in order to learn how a wheel-chaired person feels. The only thing you can imagine is that they have been cheated in order to make them seem like good people. Let's think about this awkward question: Why do we bother to appear as good people?

Recent studies at North American universities have demonstrated something that we should have already suspected: that unpleasant, aggressive and ill-mannered people earn more money and enjoy better working conditions than those who are kind, well-mannered and non-problematic.

Obviously, if it puts a large part of one's salary at risk, one would have to be crazy to try and be good. Hence, we try with all our efforts to not be seen as such, although deep inside we can be touched by many things, such as children. Why is that? Because our survival instinct isn't individualistic. As a species we are social animals and know by instinct that our possibilities of survival increase if we work together in groups.

For this reason, to be selfish, competitive and mean, we should force our natural inclinations. Indeed, and despite what I have written in a neutral language, you may think upon reading this that I have gone completely crazy. Don't worry, that would be a normal reaction. Kindness has a bad reputation, and that is simply what I'm trying to explain. All of us would run away if anyone approached and asked us to be good. Javier Cercas [2010] explained it very well:

'Today goodness is a thing of wimps and Pharisees, a disguise for savage egotism, a con game for moralists and sentimentalists, a virtue for losers or the lowest form of weakness; today, there are no radio talk shows which fail to use the words of Plautus every day, also quoted by Hobbes: "man is a wolf to his fellow man". (Quotation translated by the author)

But, are we really 'wolves to men?' and nothing more? Then, why are there many people —mainly youngsters—who perform volunteer work or join NGO's? Why are there so many blood donors? What's more, why do they do it? According to Richard Titmus [1970], when researchers asked English blood donors about their motives, most of them (98%) said that they did it to help people that they wouldn't ever meet.

The answer to that question 'Why?', according to Adam Phillips and Barbara Taylor [2009], is very clear, despite what the sceptics of 'goodness' say, that human history teaches us that people are competitive, greedy and violent: Only a fool would deny it, but the greatest fool is a pessimist who pretends that selfishness is everything, who denies what everybody knows deep inside themselves: that feelings of friendship and reciprocity are among the greatest pleasures that human beings can know.

I insist: It's a pleasure. I encourage you to discover if it's worth it. And don't worry if you're accused of doing it to please yourself. 'Be selfish! Do good! And you will save a lot in doctors' fees.' So said the author and doctor, Josh Bazell [2009], when asked once for medical advice, adding, 'Do good even if it's only saying nice words to everybody. And, if you can, help with something else. Nothing will make you feel so useful or increase your desire to live, and as a result, your health.' When the interviewer, the excellent journalist Lluís Amiguet, pointed out that he seemed a priest, Bazell added: 'A primate never goes so far away from the group that you cannot hear him; we're primates and our welfare depends on everybody else's'. (Quotation translated by the author)

I think that I have roughly explained how my interest moves towards an architecture that tries to improve 'the welfare of everybody'. Because comfort—as doctor Bazell affirms about health—should be public; if not, it is not what it aims to be. Or, in Kenneth Frampton's [2011] wise words: 'If architecture is not tailored to everyone, its' only value is to the arrogance of some.' (Quotation translated by the author)

Concerning 'why' my attitude toward architecture has changed, I choose to ignore that question. Perhaps it is simply because I'm getting older and am experiencing what Juhani Pallasmaa has already forewarned: I am now interested in more situational, material and emotive architecture.

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# 



**LOCUS - Let's Open Cities for Us** is an Intensive Programme (IP) under the Erasmus Agreement of the European Union. It conducts short-term teaching activities in which students and lecturers participate from different European Universities over a planned period of three consecutive years.

The set of workshops works on the issue of inclusive urban design in different patrimonial urban centres characterized by steep and complex topography. The study is carried out by Architecture and Urban Design students, who analyse current problems related to accessibility in historic centres and propose possible solutions. The research has been conducted specifically in four Iberian cities: **Tarragona** (Spain -2008), **Girona** (Spain -2008), **Évora** (Portugal -2009) and **Ibiza** (Spain -2010).

LOCUS IP is promoted and coordinated by the Universitat Politècnica de Catalunya (UPC-BarcelonaTech), through the Càtedra d'Accessibilitat (CATAC) and the Escola Tècnica Superior d'Arquitectura del Vallès (ETSAV). It works in partnership with 8 European Universities: Bucharest (Romania), Krakow (Poland), Lisbon (Portugal), Lund (Sweden), Montpellier (France), Oldenburg (Germany), Reggio Calabria (Italy) and Tampere (Finland).

# PROMOTER TEAM

### ORGANIZATION AND COORDINATION

Erasmus National Agency (OAPEE)

Universitat Politècnica Catalunya (UPC-BarcelonaTech)

Escola Tècnica Superior d'Arquitectura del Vallès (ETSAV)

Càtedra d'Accessibilitat (CATAC)

### ACADEMIC MANAGEMENT (UPC-BarcelonaTech)

### **RESPONSIBLES:**

Rector of International Policy: Antoni Giró i Roca

Vice rector of International Policy: Lluís Torres Urgell

Head of the Service of Institutional and International Relations: Berenice Martin Reyna

### ACADEMIC COORDINATION:

2007-08: Daniel Guasch (Head of CATAC)

2008-10: Marta Bordas (Researcher of ETSAV)

### ACADEMIC BOARDING STAFF (ETSAV)

Marta Bordas (Researcher)

Miguel Usandizaga (Professor)

### FINANCIAL MANAGEMENT (CATAC)

Maria Hortènsia Álvarez (Administrative manager)

Natàlia Sogas (Secretary)

### STUDENT SUPPORT (ETSAV)

Sergio Garcia

Josep Garriga

Laura Redondo

Alba Romera

Carlos Vidal





SPAIN UPC-BarcelonaTech (coordinating institution)

Escola Tècnica Superior d'Arquitectura del Vallès - Universitat Politècnica de Catalunya-BarcelonaTech



FINLAND \_ TUT

Arkkitehtuurin laitos - Tampereen Teknillinen Yliopisto | Tampere University of Technology



FRANCE \_ ENSAM École Nationale Supérieure d'Architecture de Montpellier



GERMANY \_ JADE-HS
Fachbereich Architektur - Jade Hochschule Wilhelmshaven Oldenburg Elsfleth | Jade University of Applied Sciencies



ITALY UNIRC

Facoltà di Architettura - Università Mediterranea di Reggio Calabria



POLAND PK

Wydzial Architektury - Politechnika Krakowska | Cracow University of Technology



PORTUGAL UTL

Faculdade de Arquitectura da Universidade Técnica de Lisboa | Technical University of Lisbon



ROMANIA UAUIM

Universitatea de Arhitectura si Urbanism "Ion Mincu" | "Ion Mincu" University of Architecture and Urbanism



SWEDEN LTH

Lunds Tekniska Högskola - Lunds Universitet | Lund University

# FUNDING

LOCUS IP has been approved and funded primarily by the European Union's Erasmus National Agency of Spain OAPEE (www.oapee.es).

As the target of the programme prioritizes accessibility issues and inclusion of all people, LOCUS promoters were committed to finding extra funding so that all students could participate, independently of what kind of accommodation or working aids they might need to perform the activity. Thanks to the funding received from Fundació Jesús Serra (www. fundaciojesusserra.org) this has been possible, and LOCUS IP is proud of the diversity encountered among participants: ranging from several students in wheelchairs to a variety of professors and consultants who were visually impaired or who had limited mobility.

The remaining funds needed for each specific workshop were raised through the support of other public institutions and private companies, such as the Spanish company, AKZO NOBEL; the Fundación Adecco (LOCUS-Tarragona); the Spanish organization for disabled people, Real Patronato sobre Discapacidad (LOCUS -Girona); and the Portuguese bank, Caixa Geral de Depositos (LOCUS-Évora).

Aside from economic support, LOCUS has also benefitted from logistic reinforcement and other fungible goods:

- Several renowned public institutions concerned with disability and accessibility issues backed the LOCUS IP initiative with their experience and resources, particularly: the Spanish organisation for the blind, ONCE; the Design For All Foundation; and the Portuguese institute for rehabilitation, INR.
- In every city LOCUS studied, each respective School of Architecture was contacted and invited to participate in the programme and, thus, extend the various contributions and opinions that may be offered to the accessibility paradigm. All of them expressed interest in participating and provided students and/or teachers, as well as facilities for the workshops and logistical support for the various activities.
- In the same way, the Architects Association of each city of study was contacted and they all responded positively to the idea of collaborating on events for public presentation and disseminating the preliminary and final results from the activities. They also agreed to provide all the data, mapping and equipment necessary for the activities.

















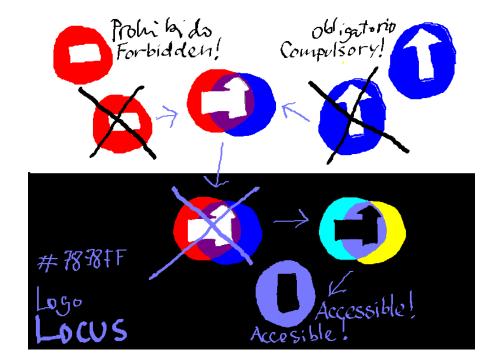






WHY THIS LOGO?

drawing by Miguel Usandizaga





The purpose of the study is to carry out research on universal design in public space to eliminate architectural barriers in historic city centres, especially world heritage sites where the topography is complex and steep. Most of these cities were originally fortified sites atop a hill, protected by a medieval wall for defensive purposes. This condition, which was indispensable in the past, absolutely contradicts contemporary needs: the primary purpose of cities nowadays is to reverse this situation and open up the cities to the exterior. We must, therefore, rethink our historic urban areas and ensure that equal access is facilitated, but without forgetting to protect heritage and pass it down to the next generations.

LOCUS IP's main interest is to create equal access in constructed environments where freedom of action is limited, especially in protected historic sites where any proposed project faces the most controversial opinions. The objective of giving equal access --regardless of people's different abilities, and without undermining the city's heritage-- is to cultivate inclusive architecture that can address individual needs globally and provide an accessible environment which stimulates all the senses in a way that enhances everybody's perception of beauty and harmony.

The aim is to improve the relationship between architecture and society: architects must design an environment suitable for all individuals equally, without considering those with disabilities as 'special cases' who can be limited to different accesses, restricted spaces and alternative itineraries for reaching their destinations. The challenge lies in making the city as universally usable as possible, in other words: **inclusive urbanism**.

In order to gain more input and different views on the topic of inclusive design, efforts have been made to maximize the variety of participating countries; all of them represent various European regions with distinct approaches to accessibility and disability issues. A group of about 30 students participate in each workshop and they are split into mixed-ability and multicultural teams of 3-5 students to foster group discussion and cooperative learning.

LOCUS IP is an intensive teaching activity, which creates a working environment of complete immersion in the subject. Not only do participants inhabit and work in the target city for fifteen intensive days, but they do so from the particular point of view of people with special needs. This results in proposed innovative designs that improve the general accessibility of the place. The design process works from the inside to the outside; that is: the site is inhabited day and night so that its life can be felt and experienced, the locations of desirable places can be known along with why they feel desirable, as well as the vacant locations and why it is they are empty. As the environmental psychologist Karen Franck and the architect Bianca Lepori assert in their book, Architecture Inside Out [2000], 'What is particular to the process of inside out is creating from the potential of the site and the needs of local residents'.

The simulation of disabilities is also encouraged in order to analyse and understand the diverse needs of the population, to make students more aware of possible limitations that can be encountered, and to find possible solutions for those limitations. Urban design and mobility issues are considered, with special attention to: access, connections, paths, pavements, street furniture, parking areas, public transport, etc., so that they can be suitable for all types of users, without distinction and/or space restrictions.

This working system is valuable for architecture students, not only for them to know and understand a city, but also for them to understand the accessibility difficulties met by disabled people. It is about the innovation of inclusive architecture, an intelligent architecture which can equally address all our present demands, regardless of people's different capacities, and without renouncing the beauty and harmony we perceive in our inheritance.

## METHODOL OG

The methodology recreates similar case studies over 3 consecutive years and expands on their results and conclusions. The research has been carried out specifically in 4 Iberian cities with similar morphological conditions: Tarragona (Spain-2008), Girona (Spain-2008), Évora (Portugal-2009) and Ibiza (Spain-2010). All of them are medium-sized cities with similar topography and development growth. They also have similar mobility problems between the old centre located atop a hill and the new city below. LOCUS sites generally have steep topography, which makes mobility very difficult and slow. Mostly, the topography cannot be modified, which severely reduces the number of possible solutions. Furthermore, LOCUS IP confronts the most adverse conditions: accessibility must be guaranteed for all, regardless of their different abilities, but at the same time the heritage of the city must be respected. Thus, by having to solve highly complex situations, participants brainstorm evocatively (not only the students and professors, but local authorities as well). The aim is to design innovative and feasible solutions, to conceive new proposals, all with an open mind.

The LOCUS IP working system proposes an exercise that must be solved as an architectural competition. Then, at the end of the two weeks, the results are exhibited, with the layouts of every working group displayed. Experts and local authorities from each city under study are invited to take part in the jury and choose the three winning projects. By conferring awards, the participants' enthusiasm and motivation increases. At the same time, approaching the task as a competition guarantees that the students will exercise layout presentation skills: the project panels must be comprehensible without the need for defending them orally. Every workgroup must decide and agree on how to be clear and concise with the concepts and aims of their proposed solution. The schedule is organized in such a way that, over the first days, the participants receive all the documentation and lectures necessary to understand the task, the site, and its particular circumstances. At the end of the first week, a preliminary presentation is organized, so that each workgroup presents and defends their project concept and receives feedback from professors and other students. The second week is mainly free of lectures and dedicated to making final decisions, finalizing the projects and preparing the material for the exhibition.

Students are required to develop systems of representation that are comprehensible by all, including those who are visually impaired (relief plans and maps, tactile models, special signs, etc). Indeed, since LOCUS-Évora 2009, LOCUS IP has counted on the great collaboration of Carlos Mourão Pereira, a talented architect who became blind in 2006 and, rather than discontinuing his professional activity, he has continued in his architectural practice and expanded it into teaching and research. Mourão, who is presently developing his PhD Thesis in Architecture, joined the programme as an expert and delivered a specialized lecture on the topic. He has also collaborated as a visiting professor, spending some days in the workshops, assessing the students and correcting their proposals.

# LOGISTICS REPORT

Given the large number of Universities interested in LOCUS IP (1 coordinating institution + 8 partner institutions = 9 universities), the programme was originally conceived as two different workshops per academic year in order to avoid overly large groups of students working simultaneously, which would cause several logistical problems. So, during the first year of the programme in 2008, half of the partner institutions took part in the first workshop in Tarragona (Spain) and the rest in the second workshop in Girona (Spain). Therefore, the result was 5 participant universities (1 coordinating institution + 4 partner institutions) per workshop, providing 6 students per university and obtaining a suitable group of about 30 participating students.

However, in the following years (Évora, Portugal [2009] and Ibiza, Spain [2010]), financial and logistical restrictions limited the workshops to only one per year, with all 9 partner universities participating together. Consequently, the number of students per university had to be reduced from 6 to 4, in order to obtain a similar group of about 30 participants, which can be considered about the right number concerning the logistics involved in the kind of intensive programme that LOCUS IP is. However, although the total number of students followed the original plan, it is worth noting that the number of professors doubled because the students usually come accompanied by their respective leader professor.

In an effort to provide a brief logistical feedback report, it is important to mention that:

Firstly, finding a workplace for such a group was quite a challenge. Sometimes there was no other option but to split the participants into separate rooms, which were not always equally equipped, and then alternating the spaces so that they could be used in an equal manner. Aside from the workplace conditions, coordinating and refunding travelling expenses was quite a demanding task as well: journeys from eight different countries were organized rather than half of them, as originally planned. Finally, there was the difficulty of finding accommodation for approximately 40 people over two weeks in the same city, especially being restricted to the city centre or immediate surroundings as LOCUS IP aimed. It was not always easy.

Secondly, all the necessary extra effort when organizing a workshop in a country different from the coordinating institution is a noteworthy task. This was the case of the workshop held in 2009 in Évora (Portugal), which would have been impossible without the assistance of Carlos Lameiro, leading professor from the Portuguese partner institution. He supported us greatly in so many ways, such as finding a workplace, contacting the local authorities, finding collaborations with public and private institutions concerned with accessibility issues, communicating with the press, and a long list of et ceteras.

# 

TARRAGONA\_SPAIN February 2008



GIRONA\_SPAIN July 2008



ÉVORA\_PORTUGAL July 2009



IBIZA\_SPAIN April 2010



February 2008



# PARTICIPANTS



LTH (Lund, Sweden)

Stud: Henrik Börjesson Katarina Eriksson Ola Gustafsson

Kajsa Lawaczeck Körner

Alexander Malm

A

UAUIM (Bucuresti, Romania)

Prof: Vlad Thiery

Stud: Aniela Ban

Gabriela Bratu Iulia Delcea Mihai Dénes

Alexandru Munteanu

LOCAL GUEST

URV (Reus, Spain)

Blanca Natividad Rupérez

UPC UPC

UPC (St. Cugat del Vallès, Spain)

Prof: Marta Bordas

Miguel Usandizaga

Stud: Marina Bruno

Laura Padrós Tomás Rodríguez Carlos Vidal Adrià Vilajoana



UTL (Lisboa, Portugal)

Prof: Carlos Lameiro

Pedro Rodrigues

Stud: Ana Luísa Almeida

Joana Batista Simão Botelho Daniel Neves Marta Pinheiro EXTERNAL CONSULTANTS

Francesc Aragall\_ Pres. Design for All Foundation

Sandra Bestraten\_ UPC Prof. architect

Emili Hormías\_ UPC Prof. architect

Xavier Garcia-Milà\_ Architect

Jordi Granell\_ COAC Culture responsible

Rogelio Jiménez\_ Tarragona City Council architect

Ricardo Mar\_ URV Prof. architect-archeologist

Estanislau Roca\_ UPC Prof. architect

# SPONSORS















# SCHEDULE 2nd February - 17th February 2008

February 2nd (foreign participants arrive)

19h Meeting point: Sants railway station

February 3rd

09-12h Guided visit of the city

16-18h Lecture: Accessible Tarragona, by Emili

Hormías and Sandra Bestraten

February 4th (working place will be COAC Tarragona)

10h Opening ceremony

11-13h Lecture: Design for all concept,

by Francesc Aragall

15-18h Accessible Visit to the workshop

project area

February 5th

09-12h Working time

12-14h Lecture: **Urbanism of the Roman Tarraco**,

by Ricardo Mar

16-18h Working time

February 6th

09-14h Working time

16-18h Lecture: Interventions in Roman Tarraco,

by Estanislau Roca

February 7th

09-18h Working time





February 8th

09-13h Working time

15-18h 1st Proposals presentation

February 12th - 14th

09-18h Working time

February 9th - February 10th

Visits and architectural sightseeing around Tarragona

+ free time

February 15th (jury session, awards and recommendations)

09-13h Project final presentations

15-18h Jury deliberation

20.30h Award ceremony

February 11th

09-14h Working time

16-18h Lecture: Accessibility and technology,

by Xavier Garcia-Milà

February 16th

Professors' comments on the projects

Final discussion

Farewell party





# THEME

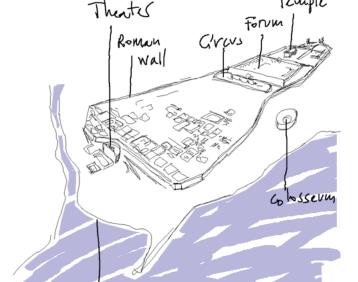
Tarragona is located on a sequence of terraces at different levels. The lowest terrace is 1m above sea level, and the topmost is 80 m high. This has been so since antiquity, and the need to improve the connections between the terraces is still felt today by the population of Tarragona and it is a major urban challenge for the city council. This singular topographical condition of the city, along with an increasing social awareness about disabled people and the growing number of elderly tourists with limited mobility, provides the ideal workshop exercise: the design of a link.

Task: To design a link as a universally accessible pathway, connecting the harbour with the historical city centre in the upper part.

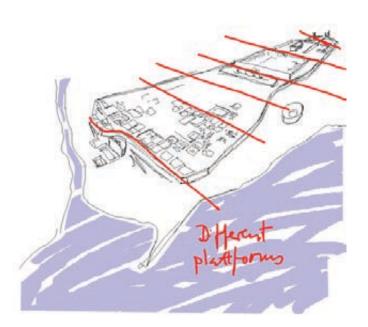
Historic buildings

Route: The ends of the link are the following: the Serrallo (fishermen's quarter) and the walkway surrounding the Roman walls at the upper end of the historical centre. The link has to go along the seafront and allow access to the following places:

- Serrallo / Harbour/ Roman amphitheatre (sea level terrace: +0-10m high)
- Congress Hall (terrace +30m high)
- Rambla Nova (terrace +40m high)
- Rambla Vella (terrace +50m high)
- Historic centre: Rei square, Pallol square (terrace +60m high), Cathedral (terrace +70m high)
- Roman wall walkway: starting at the University building (terrace +80m high) and ending at the Porta Roser, one of the entrances to the city (terrace +60m high)



Historic terraces

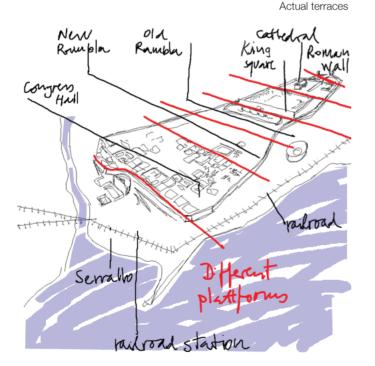


**Tracing**: The link layout has to be decided by every workgroup. In the excavation tour, the link only has to provide access to the public archaeological areas. Workgroups are allowed to work on the hypothesis of a complete or partial removal of the railway tracks north-northeast from the railway station, if necessary. Indeed, the local government is presently discussing this possibility.

**Mechanical systems**: The use of different mechanical systems for transporting people (lifts, movable platforms, mechanical ramps or stairs, etc.) has to be decided on by every student working group.

**Facilities**: The link has to include, at some point on the route, the following facilities:

- An information centre for accessible tourism with seating and coffee area (150 sqm.)
- Adapted restrooms (20 sqm.)
- A centre for technical assistance, storage and lockers (80 sqm.)



Rayball Station

Rayball Station

Serrallo

Remailes Promerade around round round walls

Remailes Parties

Colosseum

Locus

PATHWAY AREA

I ink area

# 1 st prize TARRAGONA 2008



Henrik Börjesson Laura Padrós Marta Pinheiro

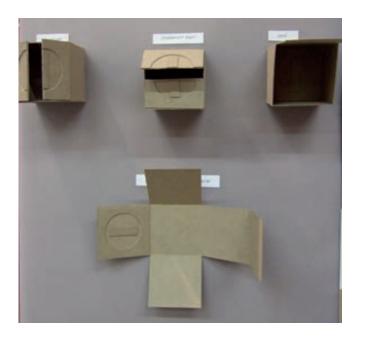
# Accessible Tarragona

The analysis of several city targets impeding its access let us define an accessibility map, efficiently connecting the various points and researching the height difference between them. Using this map we traced a route through Tarragona that would improve the city's accessibility in a clear and direct way.

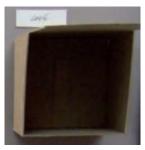
A central axis has been identified, stretching from the harbor's seafront to the university administration building. Our aim is to make it pedestrian.

Extending from this central axis, we also created a network of secondary pathways. Along this route we proposed a series of programmed 'prototypes' providing a variety of functions. As well as a unifying visual link for our route. They are produced using a limited palette of materials (Eg. corten steel, glass) and their functions include information points, cafés, repair workshops, exhibition spaces, performance venues, public restrooms, etc.

The prototypes



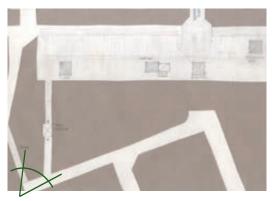






### 01. CONGRESS CENTER

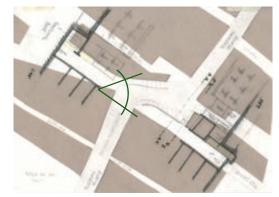
The Congress Center lift must be opened for public use giving access to the vast, empty rooftop. This rooftop will be programmed with a variety of prototypes transforming it into an active space.





# 02. BAIXADA DE LA **MISERICÒRDIA**

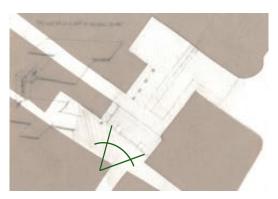
The height difference will be tackled by claiming the derelict building at the end of the turn; restoring its upper levels, redoing its first two levels with a public lift and programming it.





# 03. CATHEDRAL

At the cathedral steps we propose to claim the first two floors of the building flanking the stairs in the west, replacing these first two floors with an open space and installing a glazed public lift in it.





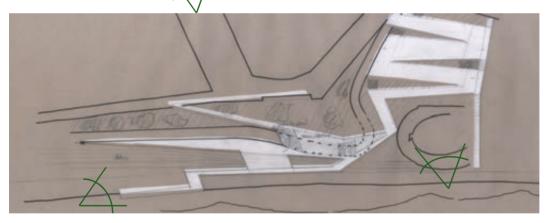
# 04. CITY WALLS

Its initial steps will be complemented with a ramp and a lift next to the ticket booth to access the top of the city walls. Once on top, a path leads along its edges untill it rejoins the stepped footpath.



# 05. RAMBLA NOVA + AMPHITHEATRE PARK

We propose moving the station further down the tracks, under the viaduct beneath the Passeig de les Palmeras, providing a new midpoint access, a public space covering the tracks beneath the Rambla Nova and an attractive accessible link to the Amphitheatre Park.







# nd prize TARRAGONA 2008



Ana Luisa Almeida Gabriela Bratu Ola Gustafsson Carlos Vidal

# Backbone

The creation of a backbone connecting the different terraces of the city will allow freedom to move inside each terrace like the sanguine system reaching all points. A natural walkway will be proposed connecting the lowest point with the highest one, a GREEN OUTSTRECHED PARK changing in use but remaining in character along the path.

In the inner parts of the city, SHORTCUTS will be made in order to facilitate movements between terraces. These interventions are punctual, and emphasize the difference in height by connecting the different levels by means of lifts.

Another 5 locations will be rethought through the global intervention:

- Railway station
- Portal del Roser
- Miracle Park
- Harbour Square
- Balcony over Rambla Nova

City interventions views









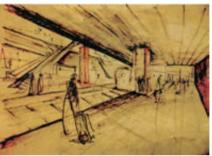




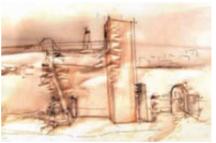


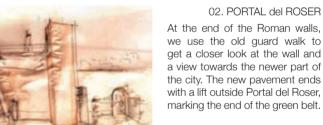
The green belt creates width over the terraces of the railway station, making an entrance square, a sun shade for the terraces and a proper connection between the station and the terraces.



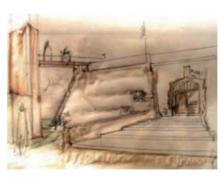












### 03. MIRACLE PARK

From the Pretorio tower, a system of ramps winds down towards the Amphitheatre. The ramps, surrounded by a park, create a sloping landscape. The slopes are a gentle 5%, with shortcuts in the form of stairs connecting the resting terraces.





# 04. HARBOUR SQUARE

On the opposite side of Carros Square, we create a new square by redirecting the traffic and taking pedestrians under the railway. The south area of this square is zoned for new development, creating new city blocks.

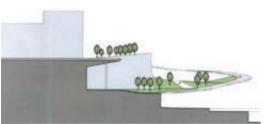


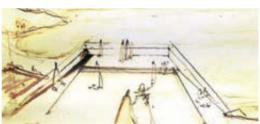




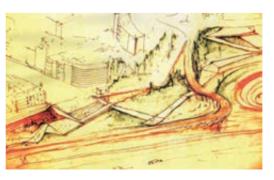
# 05. BALCONY OVER RAMBLA NOVA

At the end of Rambla Nova, we create a balcony, by extending the street over the edge of the cliff. Underneath, connected by a lift within the cliff, there is a park, an extension of Miracle park.









# 3rd prize TARRAGONA 2008



Mihai Dénes Alexander Malm Jordi Martínez

# Interior | Exterior route

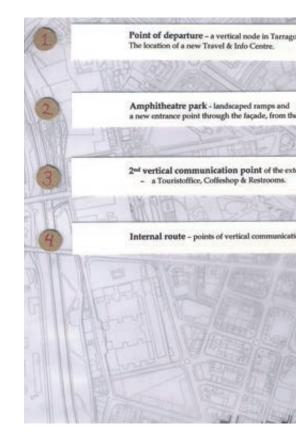
Our aim is to create an external and an internal route at the end of Rambla Nova, connecting the seaside of Tarragona with the upper part of the old town and making all the Roman monuments accessible, as well as the historical sites and places. We propose a new building between the end of Rambla Nova and the sea from which easy access in all directions radiates. The building communicates four different levels spanning over the railway:

- A new paved and planted walkway along the beach.
- The existing road for further transport with cars and buses.
- The train tracks.
- A walkway where the external route leading towards the Roman Amphitheatre, the Serrallo and harbor area begins.

A fifth level is made accessible from the pick up area of the travel centre which connects with the city centre.





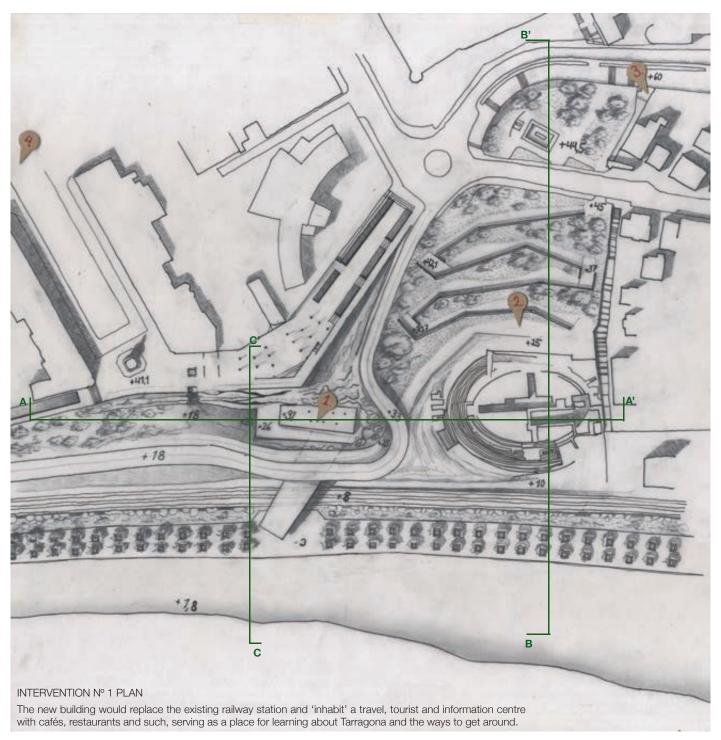


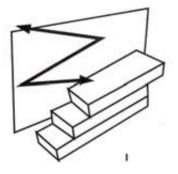


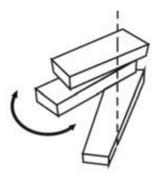


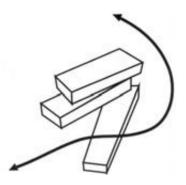
Site plan and location of interventions

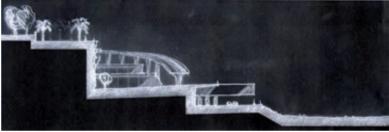








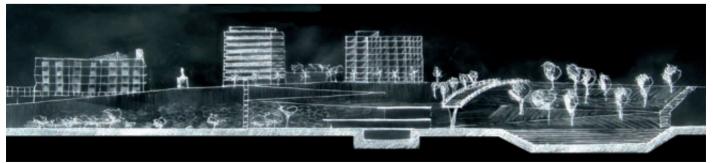




C-C'



B-B'





G1
Aniela Ban
Daniel Neves
Tomás Rodríguez

# CONCEPT

To create a circulation hierarchy using pavement treatments.

### **EL SERRALLO**

Mechanical device that covers the hole between the floor and the rail.

### HISTORICAL CENTRE

Make the old city more accessible by creating entrances and links in the inner city.

### THE TERRACE

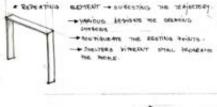
To integrate the differents neighbourghoods of the city which are not accessible yet, by making them part of the main trajectory.

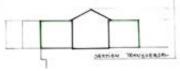
# City for all

El Serrallo











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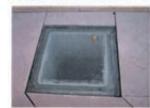
The terrace



# Marina Bruno Iulia Delcea Katarina Eriksson

# Tarragona routes









# CONCEPT

To improve and make Tarragona accessible to anyone visiting or living there. The main intervention is to move the railway to another location, which will integrate the seaside with the rest of the city.

### THE CATHEDRAL

In a building adjacent to the stairs, there is room for a lift which can bring visitors to the church level. The same building will also contain lockers and services like wheelchair and bike repair.

### THE AMPHITHEATRE

The amphitheatre is made more easily accessible in comparison to its current cutoff location. The park above it is redesigned with new easily accessible slopes and places to sit and wander about, creating a continuation of the levels of the amphitheatre below.







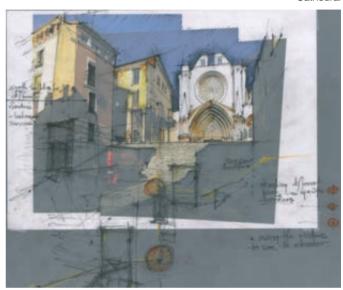
### VISUAL, TACTILE AND AUDIO TOOLS COMBINATION:

- Lights leading the way
- Tactile guides
- Sound of water

Baixada de la Misericòrdia street



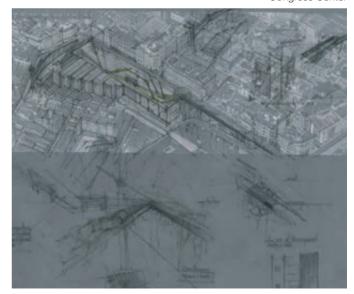




Congress Center

Congress Center





**CASE STUDIES** LOCUS | 61

The Empire Strikes Back

Inside walk

G3

Simão Botelho Kajsa Lawaczeck Körner Adrià Vilajoana



Using the lower pout of the facult, Inst the stories to attach an elevating platform this will presone the acidl line of the Cathedral and the states.







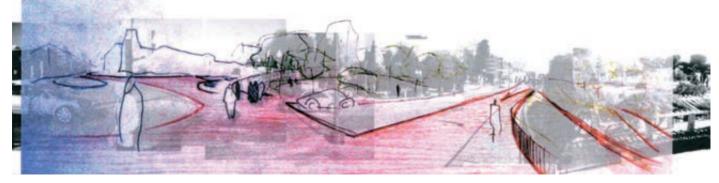
# **ACCESSIBLE ROUTES**

- Inside walk: Re-establish the Roman axis through the city, using existing buildings and mechanical devices for vertical connections.
- Outside walk: From the railway station to the Cathedral an outside walk modifies the landscape's topography.





the woundatout area is designed into a servi-pedentrian zone to connect the old city via the stope to the Amphitheatre.

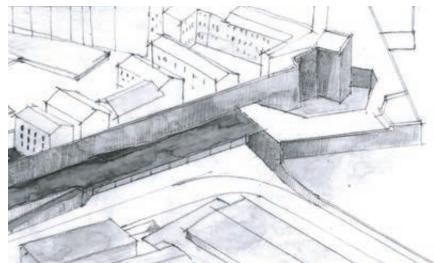


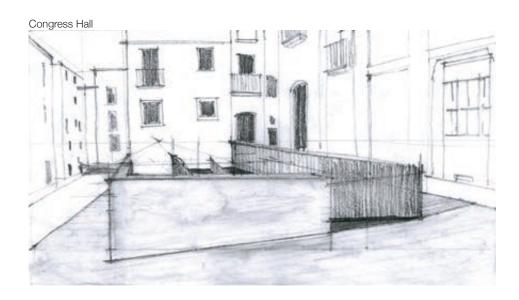


Joana Batista Alexandru Munteanu Blanca Rupérez

# Tarragona's improvement

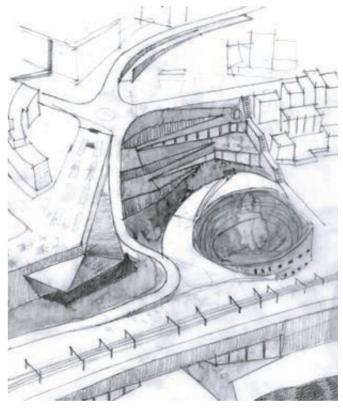
# Entering the wall with ramp





Misericòrdia street Ramps down to the Theatre

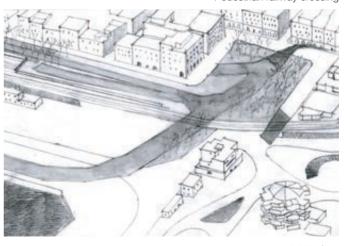




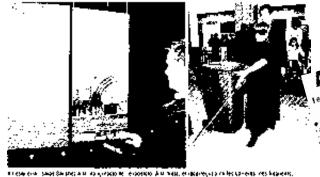
Terrace and lift down to the beach



Pedestrian railway crossing



# PRESS REPORT Arcgio parla d'estendre el disseny del Carrendel Cos del Bou à tota la Part Ma Colline of the state of the sta



# «L'entorn crea la discapacitat»

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# Expasició del projecto

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# Un circuito peri dificultades de i



# July 2008



# PAR II () IPAN



# ENSAM (Montpellier, France)

Prof: Ankel Cérèse

Nicolas Crégut

Claire Arnoult Stud:

Guillaume d'Oliveira

Silvia Nancu Vincent Roustit Marion Soave Oana Vasile



# ADE - HS (Oldenburg, Germany)

Holm Kleinmann Prof:

Stud: Antonia Cramer

Enno Garten

Marianna Karakosta Pia Nordmann Peter Rychert

Alexandra Wienekamp



# K (Krakow, Poland)

Hanna Grabowska-Palecka

Mateusz Gyurkovich

Stud: Alerksander Gruszka

> Katarzyna Krzysik Dorota Matysik Agata Stochel Paulina Styrczula Wojciech Zagorski



# UNIRC (Reggio Calabria, Italy)

Prof: Valerio Morabito

Stud: Josephine Amadeo

> Loredana Bonasera Mariacristina Clemeno Mariangela Figliomeni Barbara Frazzica Luana Parisi



# UPC (St. Cugat del Vallès, Spain)

Prof: Marta Bordas

Miguel Usandizaga

Stud: Sílvia Font

> Sergio García Natàlia Mitjà Cristina Porta Anabel Serrano Carles Tuca

# EXTERNAL CONSULTANTS

Francesc Aragall Pres. Design For All Foundation

Nadia Fava UdG Prof. architect

Josep Fuses i Comalada\_ UdG Prof. Architect

Pablo Ortega\_ SobreRodes Director

Marc Riera\_ Architect

Mª Mercè Teixidor\_ Girona City Council Mobility Chief

# SPONSORS















# SCHEDULE 12th July - 26th July 2008

July 12th-13th (foreign participants arrive)

July 14th (working place will be Cartoteca UdG Girona)

10.30h Opening ceremony

11-13 Lecture **Design for all concept**, by Francesc Aragall

15-18h Accessible Visit to the workshop project area

July 15th

10-11h Lecture LOCUS-Girona Presentation, by Marta Bordas

11-14h Groups organization + Working time

16-17h Lecture Accessibility and Tourism, by Pablo Ortega

July 16th

10h Lecture Historic evolution of Girona,

by Nadia Favia

12-13h Group discussion

15-18h Working time

July 17th

10-12h Lecture Accessibility in urban space,

by Marta Bordas

12-18h Working time

July 18th

9-13h Working time

15-18h **1st presentation proposals** 





July 19th-20th

Visits and architectural sightseeing around Girona

+ free time

July 21st-23th

Working time + group discussion 09-18h

July 24th (jury session, awards and recommendations) 09-14h **Final presentation projects** 

16-18h Jury deliberation

18.30h Award ceremony

July 25th-26th

Farewell party





# THEME

Girona presents an atypical ancient structure with a totally irregular construction over river terraces, which makes mobility through the centre very difficult. Its layout did not follow the standard or common urban planning of Roman cities: all the decumani streets (those aligned from East to West) were transformed into steps over the years, many of which still remain today.

At the end of the XIXth century, the city walls were demolished due to the growth of the municipality; in recent years, the missing parts of the city walls on the eastern side of the city have been reconstructed as a tourist route around the historic centre. Girona has one of the best-preserved Jewish neighbourhoods in Europe; under the Catalan name Call, it has become a major tourist attraction.

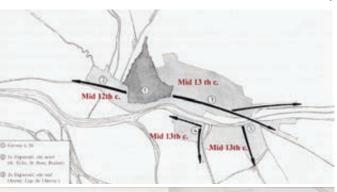
Task: To design a link as a universally accessible pathway, communicating the historical city centre with the modern city, located on opposite sides of the Onyar River.

**Route**: The ends of the link are the following: the central railway station in the modern city and the walkway surrounding the Roman walls at the upper end of the historical centre. The link has to cross the Onyar River and allow access to the following places:

### HISTORIC MAPS

XIIIth century







XVIth century



- Central railway station: +73m high (viaduct of the railroad tracks: +75-80m high)
- Riversides: +68m high (river level: +64m high / crossing bridges: +69-72m high)
- Bottom of cathedral steps: +80m high / Top of cathedral steps: +96m high
- University area: +97-107m high
- Roman walls walkway: +100-120m high

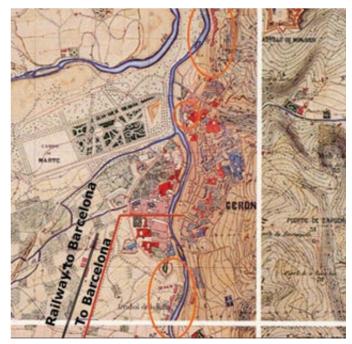
**Tracing:** The link layout has to be decided by every workgroup. Workgroups are allowed to work on the hypothesis of reusing the obsolete railway viaduct as they wish. Indeed, the local government is presently discussing the various possibilities of reutilization.

**Mechanical systems**: The use of different mechanical systems to transport people (lifts, movable platforms, mechanical ramps or stairs, etc.) has to be decided on by every student working group.

1667



XIX<sup>th</sup> century



CASE STUDIES LOCUS | 75





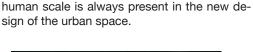
Loredana Bonasera Sílvia Font Marianna Karakosta Katarzyna Krzysik Oana Vasile

# Re-mix, re-connect, re-Girona

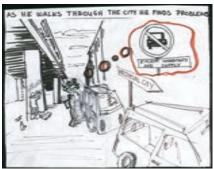
The task is to connect the area of the train station with the upper part of the city in an accessible way. The goal is to provide the maximum possible accessibility in the streets of Girona.

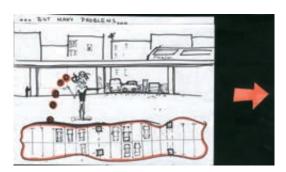
The accessible routes have to provide safety, to be functional, interesting, but also clear and easy to identify. The existing open spaces have to be refreshed with new green elements with strong identity and character.

The routes through the city are designed in an accessible way for all people connecting the most interesting and important attractions of the city while offering a pleasant cultural path through the old city center.

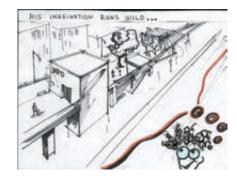


The most important thing is that the sense of



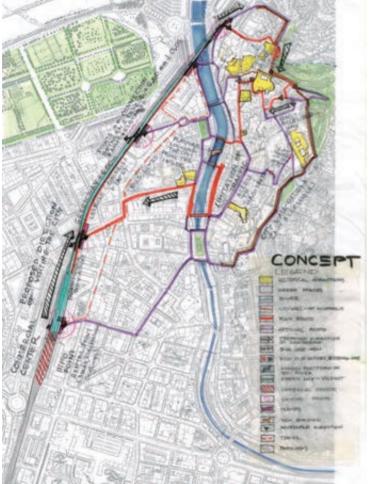


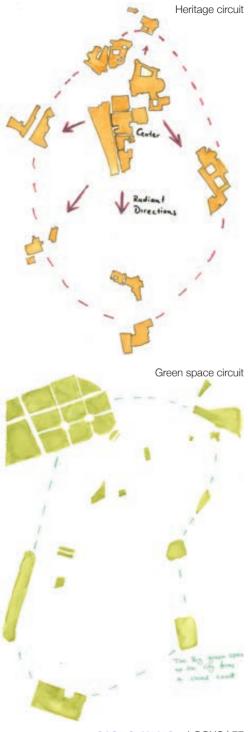


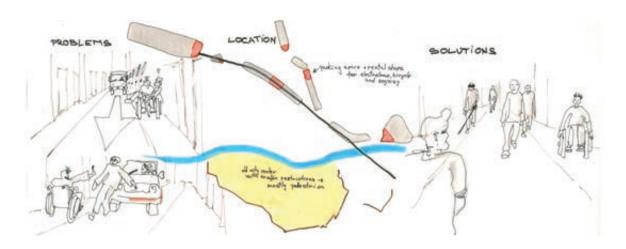


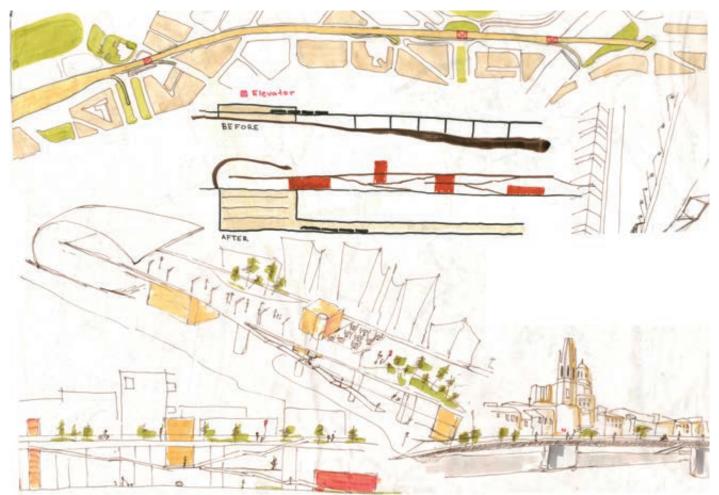


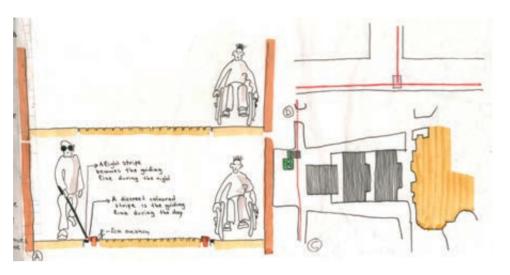








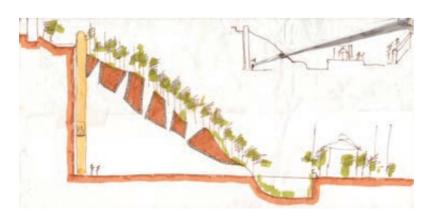














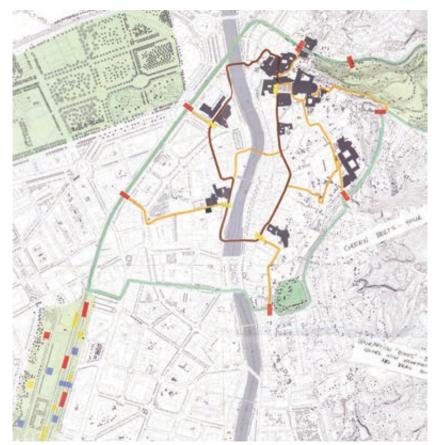


Mariangela Figliomeni Pia Nordmann Vincent Roustit Anabel Serrano Agata Stochel

# Green connections

- To promote free movement through several green areas: double outside/inside GREEN BELTS ARE proposed, so you can choose your way.
- To build information 'boxes': different textures, colours and information in different languages and the braille alphabet.
- To provide GPS systems: to prevent getting lost in the city.

- To design special pavement: safe, aesthetic and easy.
- To propose electric buses and cars: economic and ecological means of transport which can take you wherever you want.
- To create one level street: to give priority for pedestrians.



Interventions map

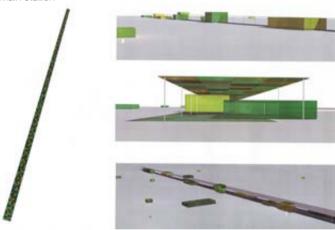








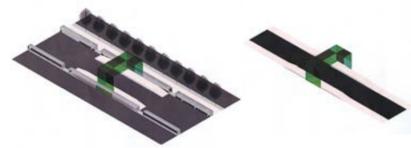
Main station



GPS SYSTEM Find your way Call an electric car Have information about buildings



Electric bus stop



Making a ramp











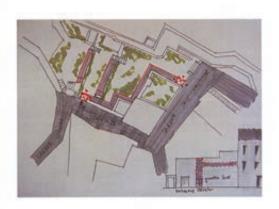
Making a ramp and a lift



Making a ramps and linking lifts











Making a lifting platform



Making a ramp and change of pavement



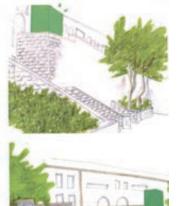








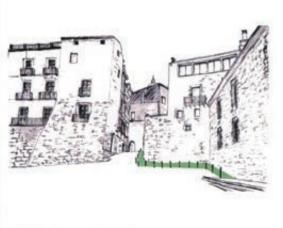
Making a lift

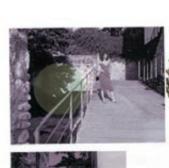


Change of pavement













Making a ramp





Barbara Frazzica Dorota Matysik Silvia Nancu Cristina Porta

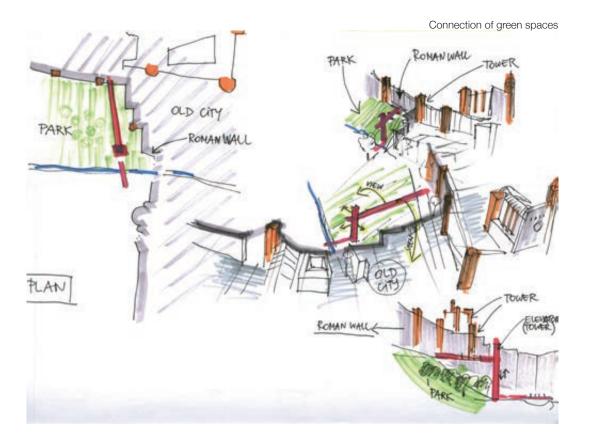
Alexandra Wienekamp

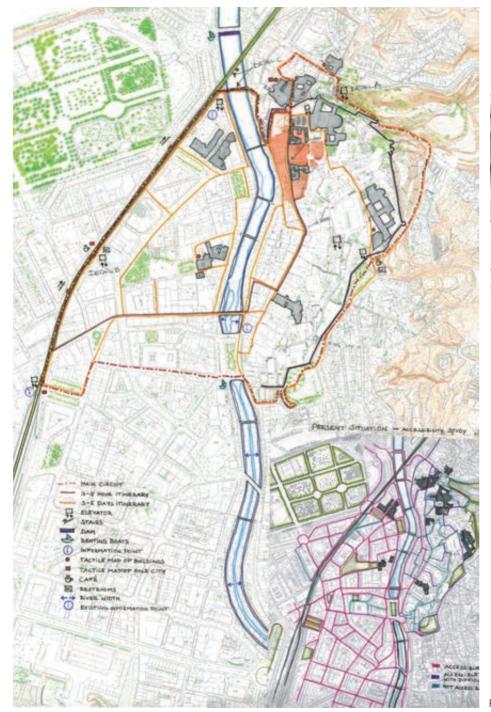
# Moving together

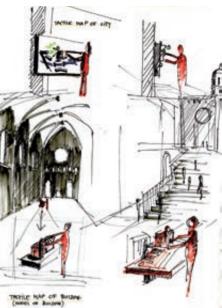
The proposal develops a main pedestrian axis, situated at the beginning of the accessible circuit and linking the train station to the old part of the city.

General information about the city, as well as information about the surrounding streets and main buildings, is offered in several 'boxes'.

Blind and ill-sighted people are guided along the pedestrian axis by texture contrasted pavement. Information is offered through tactile maps of the city and audio information. Tactile maps of the city and 3D models of the main historical monuments help present the city and its history to blind people. In some places, audio information may also be available.

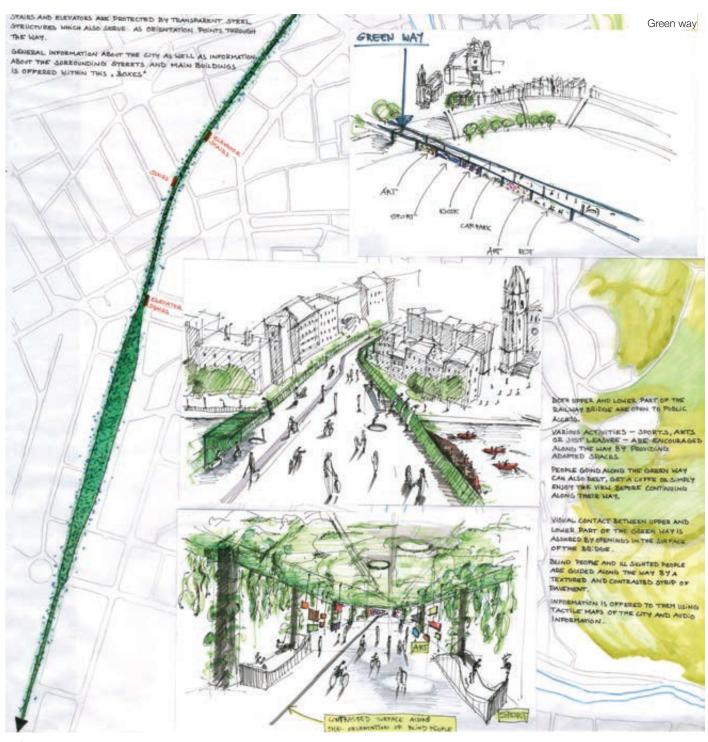


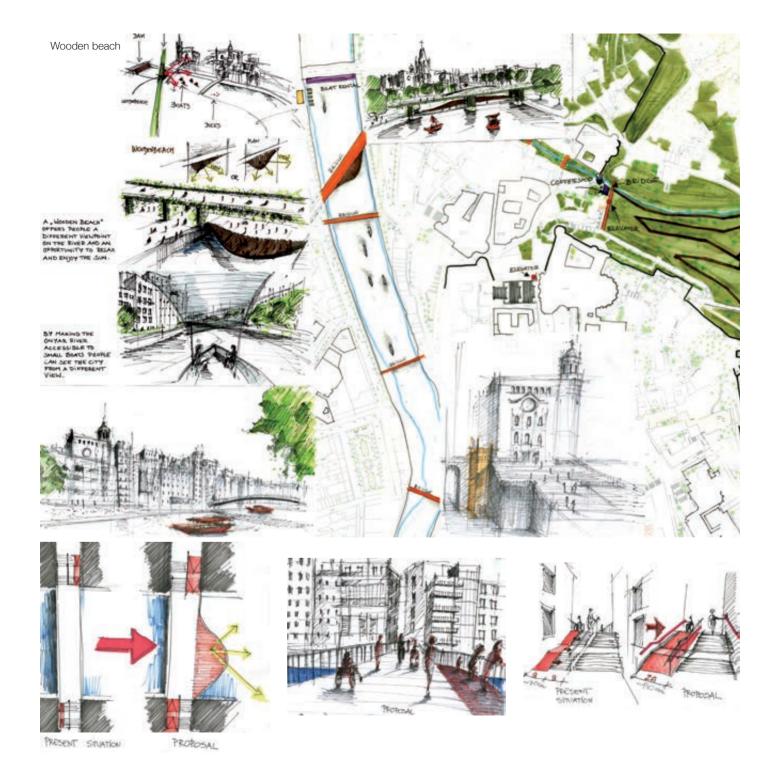




Information for blind people

Proposal map





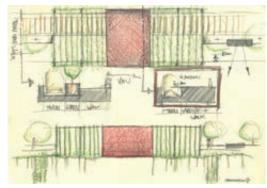


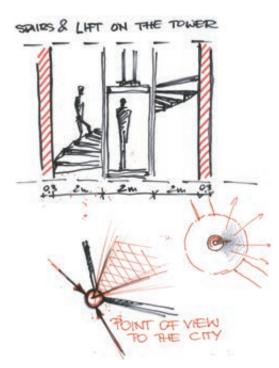
Josephine Amadeo Claire Arnoult Sergio García Enno Garten Paulina Styrczula

Make it easy

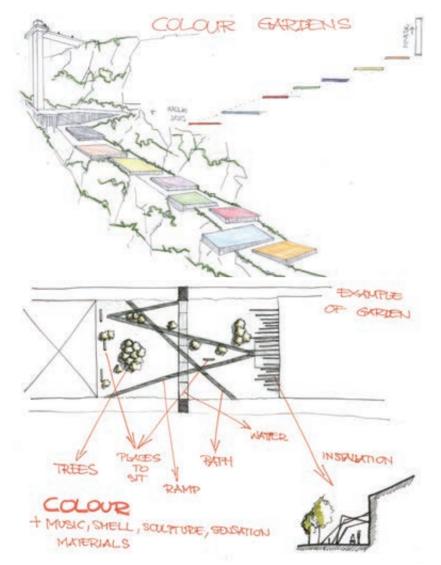


























CASE STUDIES LOCUS | 89



Girona: Bottom up, top down

Guillaume d'Oliveira Alerksander Gruszka Natàlia Mitjà Luana Parisi Peter Rychert

### CONCEPT

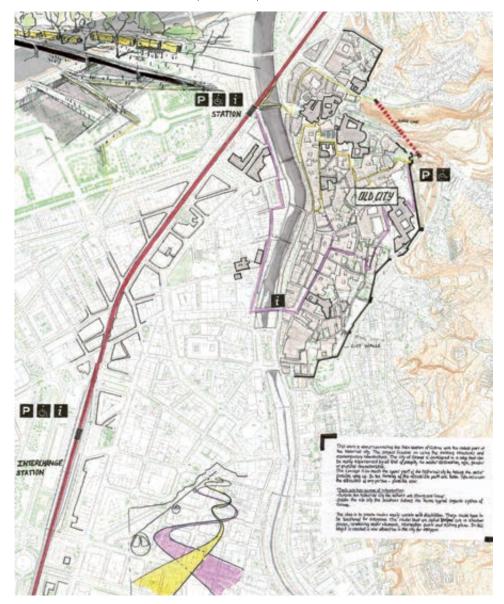
To reach the upper part of the historical city by taking the simplest way up.

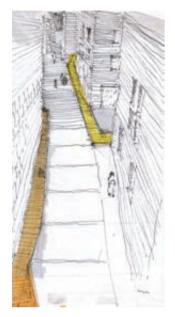
### **RULES**

- Outside the historical city the interventions are relevant and linear.
- Inside the old city the solutions follow the same organic system of Girona.

### CITY VIEWS

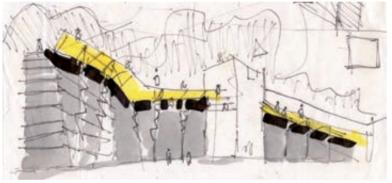
The idea is to open easly accessible routes for disabled people. These routes have to be functional for everyone. They are called 'stripes' and are in shade, combining water elements, information points and resting places.













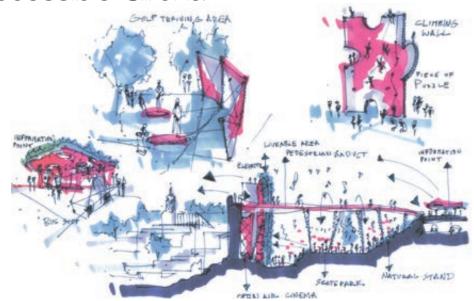


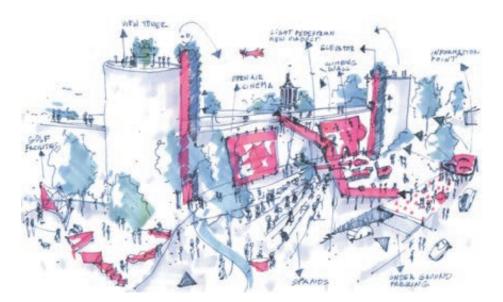
CASE STUDIES LOCUS | 91



Maria Cristina Clemeno Antonia Cramer Marion Soave Carles Tuca Wojciech Zagorski

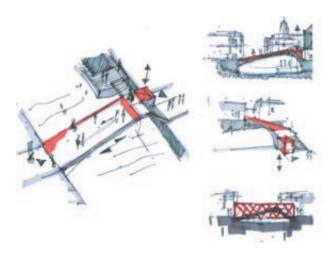
# Accessible Girona



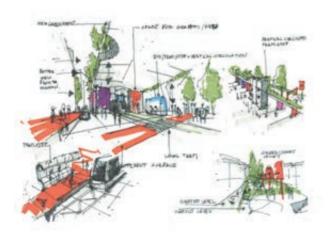


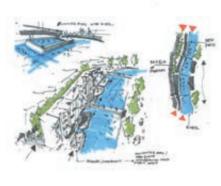
### **MASTERPLAN**

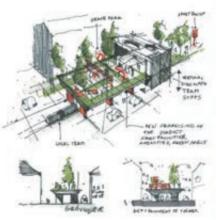
To use touch and sound as useful senses for blind people to get around Girona's old city.

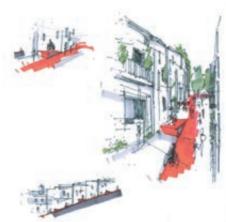






















# July 2009





ENSAM (Montpellier, France)

Prof: Ankel Cérèse

Stud: Joana da Silva Tomás

> Alchali Sisomvang Adriana Tihon Amandine Vignon



)E - HS (Oldenburg, Germany)

Holm Kleinmann Prof:

Gunnar Burmeister Stud:

> Nabil El Schami Viktor Neufeld Maike Truels Marcel Zerfas



LTH (Lund, Sweden)

John Cramer Prof:

Stud: Haydar Alward

> Josefin Nyman Mikael Pettersson Wanda Zubillaga



K (Krakow, Poland)

Hanna Grabowska-Palecka

Anna Agata Kantarek

Stud: Ewa Fedyk

> Katarzyna Gosztyla Karolina Kuchno Marcin Nawak



UAUIM (Bucuresti, Romania)

Vlad Thiery

Stud: Radu Costachescu

> **Tudor Costachescu** Daniela Craciunoiu Laura Ghita



UNIRC (Reggio Calabria, Italy)

Stud: Maria Cristina Clemeno Mariangela Figliomeni

Luana Parisi Simone Vartolo



UPC (St. Cugat del Vallès, Spain)

Prof: Marta Bordas

Miguel Usandizaga

Stud: Borja Gràcia

Eva Pérez Samuel Sánchez

Naim Solh



TL (Lisboa, Portugal)

Carlos Lameiro

Pedro Rodrigues

Stud: Mariana Santana

João Torres

# SPONSORS



i ioi. Markku Hedinari

Stud: Juuso Hatakka

Satu Huuhka Johanna Kerovuori Eeva Saarelainen

### LOCAL GUEST

uo évora UÉ (Évora, Portugal)

Stud: Rui Santos









**OA ORDEM DOS ARQUITECTOS SRS** 



## EXTERNAL CONSULTANTS

Carlos Almeida\_ Camara Muncipal de Évora architect

Peter Colwell\_ ACAPO accessibility officer

Mónica Coutinho\_ UTL Master's student

Cátia da Silva\_ FCTUC Master's student

Pedro Grilo\_ Economist, Consultancy on Sustainable Development, Planning & Design

Andreia Marques & Ana Brito\_ Dra. & architect, INR

Carlos Mourão\_ UTL architect, lecturer, researcher

Olivier Pourbaix\_ Ordem dos Arquitectos architect

# SCHEDULE

# ULE 5th July - 18th July 2009

July 5th (foreign participants arrive)

July 6th (working place will be Colégio do Espírito Santo UE)

9.30h Opening ceremony

11-12h Lecture LOCUS-Évora Presentation & LOCUS previous results, by Marta Bordas

12-13h Lecture **Accessibility and inheritance**, by Miguel Usandizaga

15-16h Lecture **Disabled persons in Cracow**, by Anna Kantarek

16-17h Lecture **Tourist route for visually impaired people**, by Hanna Grabowska

17-18h Lecture **Senses and architecture**, by Carlos Mourâo

July 7th

9-10h Groups organization

11-13h Working time

15-16h Lecture **Needs and expectations of visually impaired persons**,

by Peter Colwell

16-19h Accessible Visit to the workshop

project area

July 8th

09-18h Working time

18-19h Lecture **Presentation inclusive Évora**,

by Carlos Almeida





July 9th

09-13h Projects discussion

15-18h Working time

18-19h Lecture National and international policies for the integration of people

with disabilities, by Andreia Marques &

Ana Brito

July 10th

09-19h Working time

July 11th

09-13h Working time

15-19h 1st Proposals presentation

July 12th

Visits and architectural sightseeing around Évora

+ free time

July 13th

09-17h Working time

17-18h Lecture Daylighting, by Mónica Coutinho

18-19h Lecture Listen architecture, hearing awareness of architectural space,

by Cátia da Silva

July 14-16th

09-19h Working time

July 17th (jury session, awards and recommendations)

09-13h Final presentation projects

15-19h Jury deliberation

20.30h Awards ceremony

July 18th

Farewell party





# THEME

Évora became an internationally renowned tourist centre in the 20th century, due to its relevant historical, architectonic and artistic heritage. It was classified as a World Heritage City by UNESCO in 1986. This distinction has led to a significant increase in the number of visitors and the consequent construction of tourist facilities and services: construction of new access facilities, new quarters outside the city, a motorway, a revival of university activities, the creation of new industries, etc.

The historic centre of Évora has a complicated topography with boundaries defined by a medieval wall. The Roman walls are sited at a lower point, around 270-285m above sea level, while the topmost is 310m high and occupies the Roman Diana temple, one of the most important monuments of the city.

Évora, compared to the size of the previous cities studied by LOCUS, has a much larger surface in the city centre; thus, Évora's historic centre has been divided into 9 similar parts to be studied by every workgroup. Each of these sectors has its own specific points of interest and difficulties for resolving accessibility.

### Sectors:

- 1. Largo da Porta Nova & Sertório Square
- 2. Cathedral & Largo Conde Vila Flor
- 3. Largo das Portas de Moura
- 4. Largos: da Graça, da Misericordia, dos Castelos
- 5. Largo de S. Francisco & Public Garden
- 6. Giraldo Square
- 7. Gracia de Resende Theatre
- 8. Água de Prata Agueduct
- 9. Espírito Santo College & Old Castle (Castelo Velho)

**Task**: To improve the accessibility of urban spaces in the sector under study, by promoting universal design for its streets and access to major buildings. Therefore, each sector of study must be analysed specifically in detail by each student working group, with attention paid to how adjacent sectors connect each other and to the general urban structure of the historic centre.

**Objectives**: To develop maps of slopes and pavements of all the streets and squares in each sector at issue: The aim is to detect those inaccessible points where it is necessary to eliminate basic architectonical barriers and/or design strategic interventions.

To identify the main public buildings in each sector under study: The aim is to ensure equal access to all public areas, avoiding alternative and segregated paths if possible.

To study the main pathways connecting each sector with the surrounding sectors: The aim is to ensure connections between the different areas within the historical centre, as well as with the modern city outside the Roman walls.

**Mechanical systems**: The use of different mechanical systems to transport people (lifts, movable platforms, mechanical ramps or stairs, etc.) has to be decided on by every student working group.



1. Largo da Porta Nova & Sertório Square



2. Cathedral & Largo Conde Vila Flor



3. Largo das Portas de Moura



4. Largos: da Graça, da Misericordia, dos Castelos



5. Largo de S. Francisco & Public Garden



6. Giraldo Square



7. Gracia de Resende Theatre



8. Água de Prata Aqueduct



9. Espírito Santo College & Old Castle (Castelo Velho)

# PROPOSALS



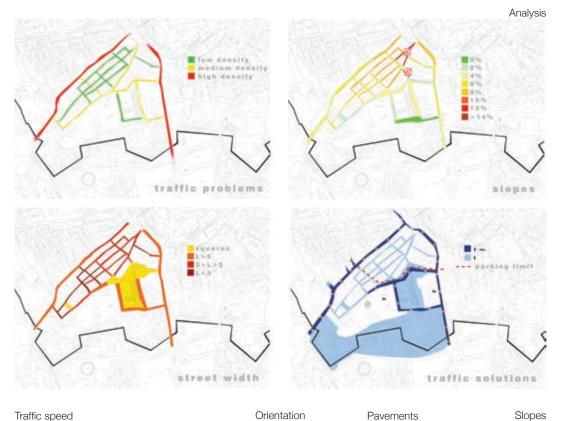


# Walk the green line

GREEN LINE is easy access for everyone. Four tools are used to achieve it: Green areas, pergolas, water and green facades are combined to create the new accessible layer in the city of Évora.

Our proposal is to make it possible to explore the wall using green areas, allowing people to be both inside and outside it. To indicate the accessible paths across the city, greenery is used.

G5 Borja Gràcia Adriana Tihon Simone Vartolo Wanda Zubillaga











### 4 DIFFERENT TOOLS

Green areas Pergolas Water Green facades

















Before and after interventions



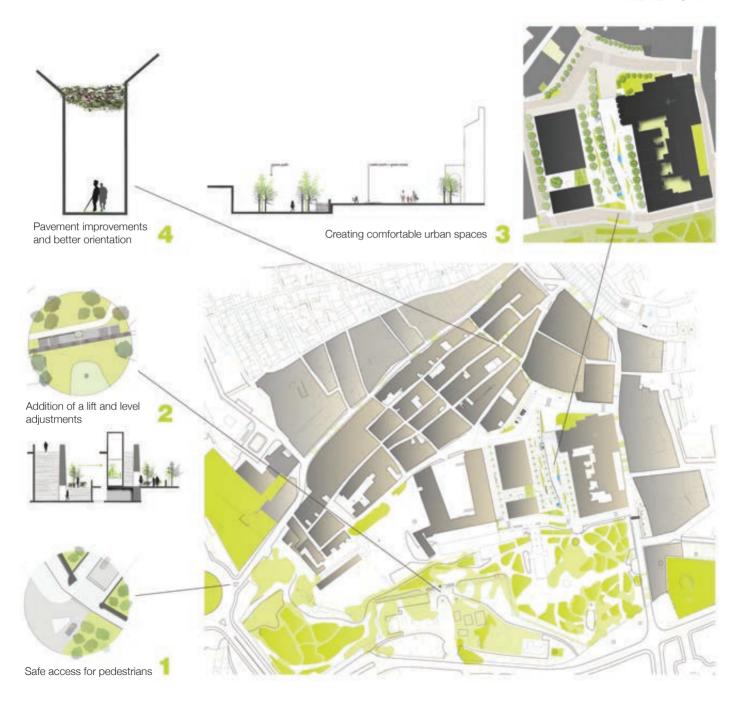
















G٤

Ewa Fedyk Laura Ghita Joahanna Kerovuori Eeva Saarelainen Amandine Vignon

# Hidden treasures

Area 8 is situated in the northern part of the old town. There is one road entering this area in the middle and another one is outside of area 8, on the west side. Red indicates important public spaces or buildings. Interesting places are also the fortress and bastion, outside the city wall.

### PROBLEMS.

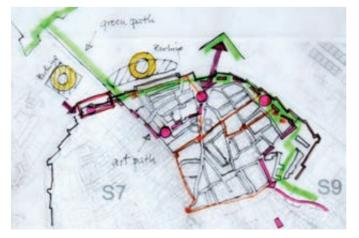
- There are no pedestrian routes and all streets, even the most narrow ones (3-4 meters wide) are used for car traffic and parking
- The sidewalk is not continuous.

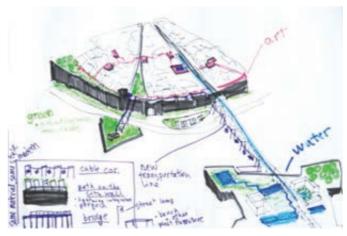
- Some streets are quite steep and at some points there are even stairs.
- The pavement is in bad condition and it is not appropriate for disabled people.
- Entrances and streets are not on the same level.
- All squares are used for parking lots.
- There are not enough shaded places or lit areas for taking a break.
- There are different interesting places and public buildings that are not in use or they are not accessible.

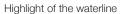


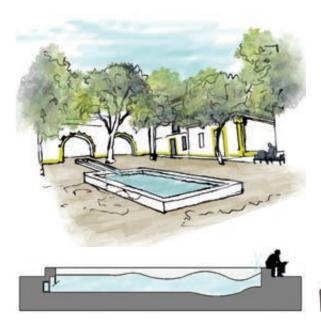


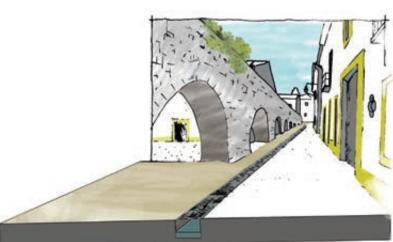
Sketch Connections











#### CONNECTIONS

We want to use the bastion as a park for everyone and we will connect it better with other parts of our area, where we have a new public space 'park for senses'.

Also, the fortress will be better connected with the old town. We would like to integrate a new connection line with the aqueduct. The fortress will function as a starting point for tourists.











#### STREET IMPROVEMENTS

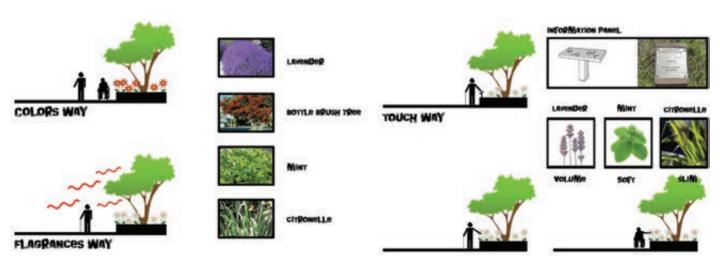
Our solution is to reduce steepness at some points and then have a steeper slope (<8%) at some points.

Flat areas are used for resting and places where there are entrances or, for example, a restaurant with a terrace. We will use suitable materials on ramps and we will use materials to show the best area for moving.



#### PATHS FOR SENSES

Private olive gardens will be open to the public and connected with Largo de Avis and the bastion. It will have a new function as a park for the senses.



# 3rd prize



G7 Karolina Kuchno Josefin Nyman Eva Pérez Rui Santos

## A lifeline for all

Our proposal is to create accessibility for everyone, designing things that Évora lacks like shade, seating, water, information and navigation. Finding an innovative way of making the roads and buildings accessible and adding a layer of activities for younger people has been our goal.

STRATEGY: creating something that is changeable, flexible, expanding over time and removable when the needs of the city change. The tools are universal and are applicable to several cities.

By building information points and a new tourist center at the main gate (sector 7) and by moving some bigger parking spaces outside of the wall, tourists will want to decrease their use of cars within the wall.

Materials







.

Problems

New meets old Évora

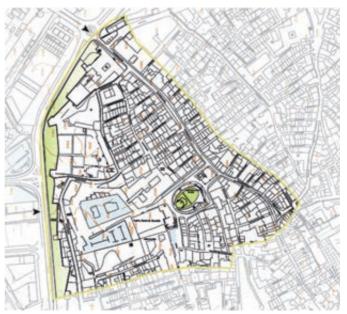
## Évora analysis



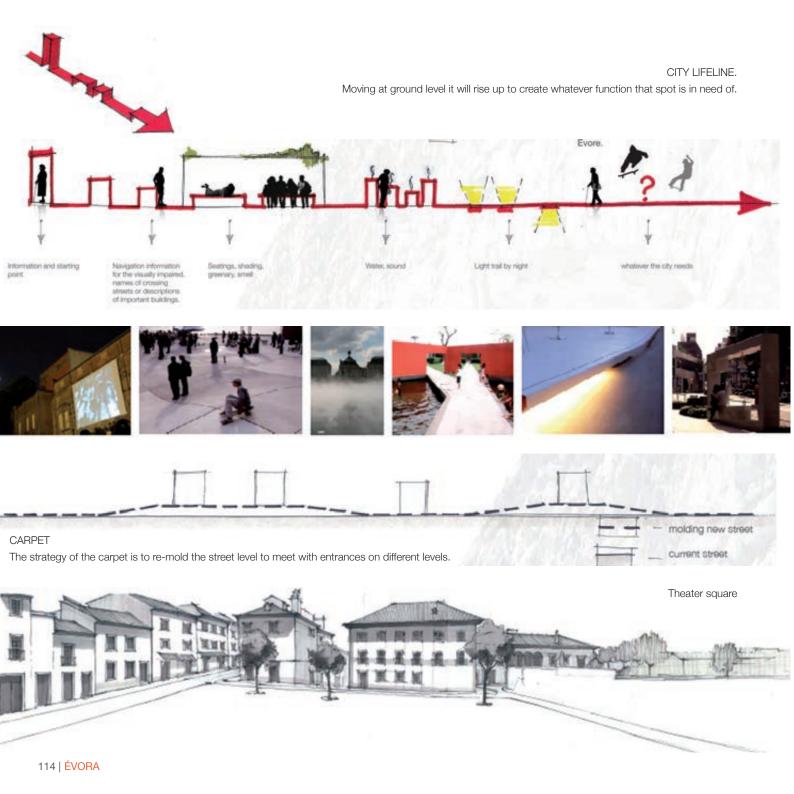


Focus area sector 7





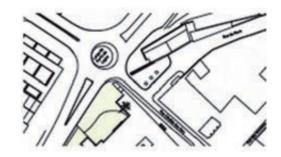
CASE STUDIES LOCUS | 113



Vision for the city

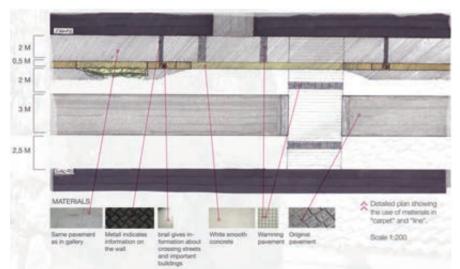
New gates













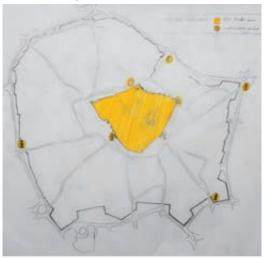




### Gunnar Burmeister Joana da Silva Tomás Juuso Hatakka Joao Torres

## Square connections

Introduction map





#### CONCEPT

Three different squares are fitted and used to connect the southern part of the city with the northern part. Connections between squares are developed using the same, previous materials.

#### SQUARE TOPICS

- Sertorio Square is developed further with the theme of water.
- Largo Alexandre Herculano is introduced as a light square, Patio du Suleima is a secret square.



#### Model pictures

















#### G2

Daniela Craciunoiu Marcin Nawak Viktor Neufeld Alchali Sisomvang

## Ebora Liberalitas Iulia



Pedestrians



#### REVIVAL OF CITY MEMORY

- To integrate the temple
- To rethink the park

#### **TRAFFIC**

- To restrict car access
- To remove poles

#### CONNECTION TO GIRALDO

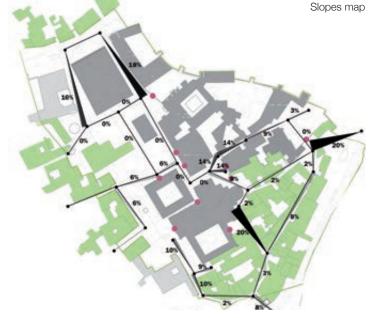
- To continue the safe route
- To guide the visually impaired within the center

#### THE CATHEDRAL

- To make it accessible
- To move the main entrance

#### STREET ACCESS

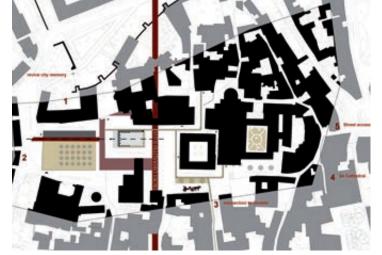
- To remove barriers
- To restore pavement
- To introduce new functions

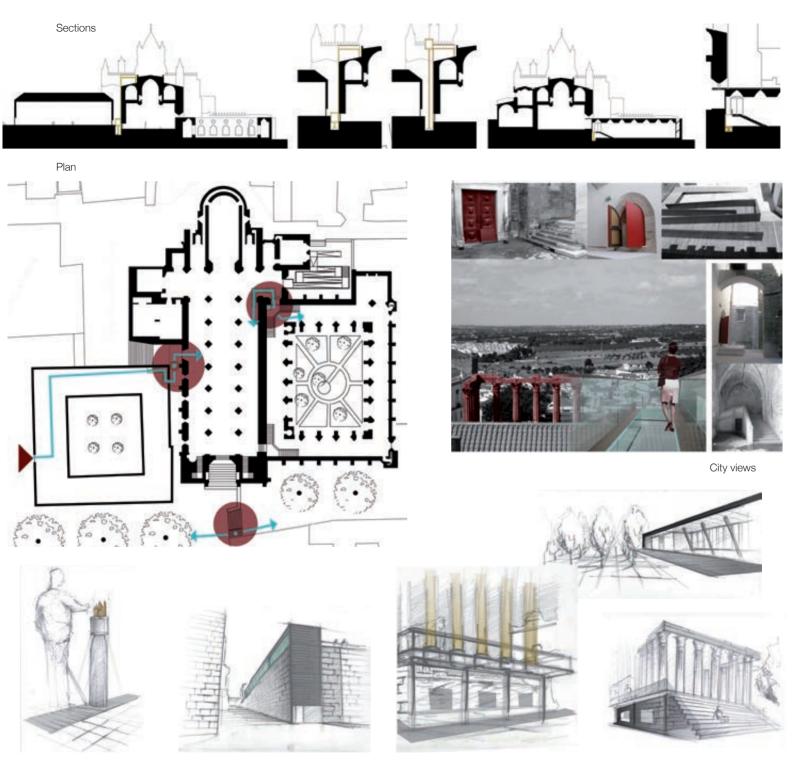


Masterplan



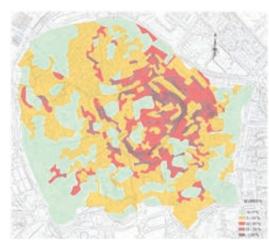






Radu Costachescu Katarzyna Gosztyla Satu Huuhka Luana Parisi

## Accessible Évora



Analysis maps

#### SPACE TYPOLOGY

Permanent public spaces

Circulation (public spaces)

Restricted usage of public spaces

Exterior private spaces

#### STREET SLOPE

0 - 5% 5% - 10% 10% - 15% 15% - 20%

> 20%

Space typology



Street slope



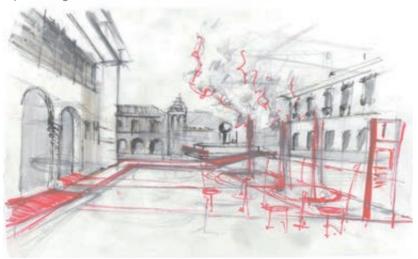
120 | ÉVORA

Street surface





Square arrangement



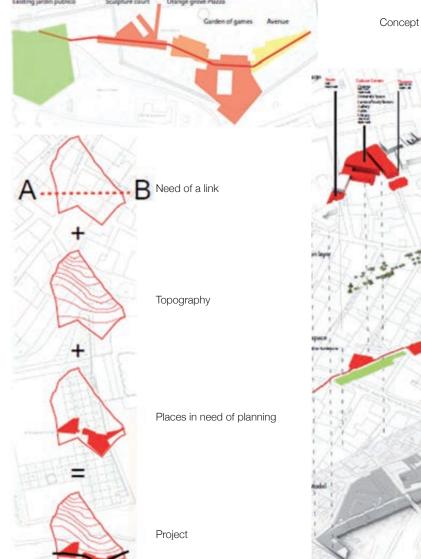




G4

Maria Cristina Clemeno Mikael Pettersson Naim Solh Marcel Zerfas

## Creating a new link



#### CONCEPT

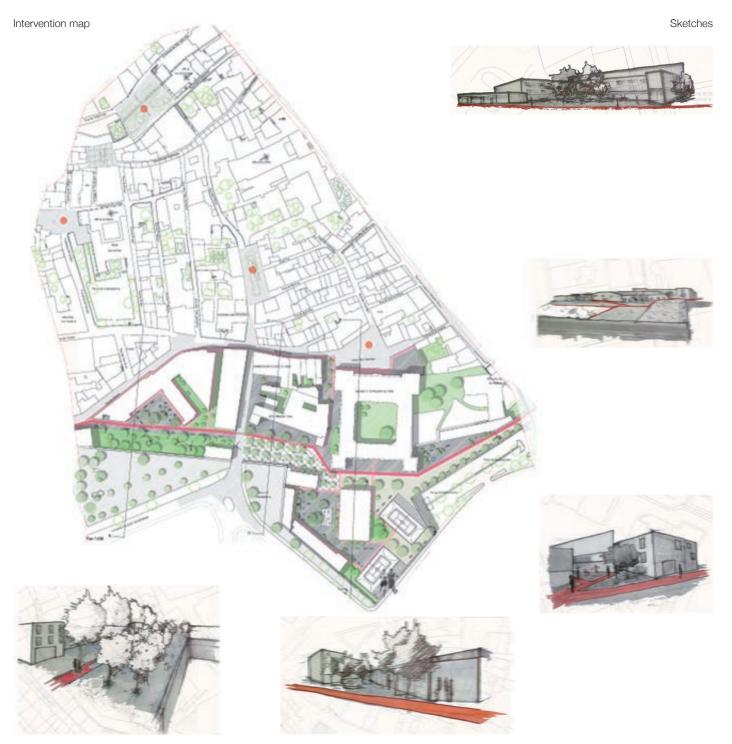
A walk through 5 landmarks, all with their own function and different qualities.

#### NEED OF A LINK

A connection between the residential and hospital areas on the east side with the marketplace and the park.

#### **TOPOGRAPHY**

The topography is one of the factors that help us decide where it's right to place the new link.



## G6 Haydar Alward

Mariangela Figliomeni Samuel Sánchez Maike Truels

## Points of view







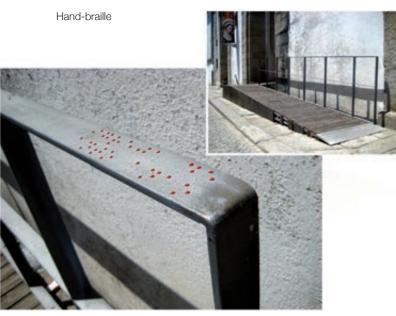






guiding line which leads you through the city. A thorough design of these points and the equal design of space in front of monuments helps you get oriented in an unknown area.



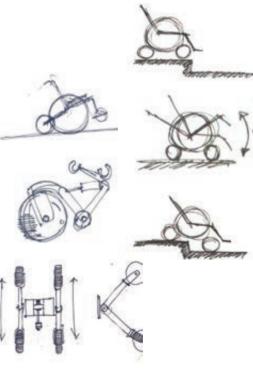




Warning metal sheet

Sketches & ideas

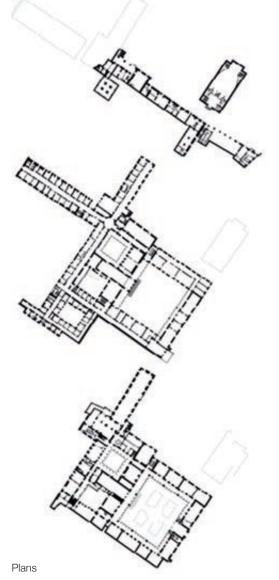


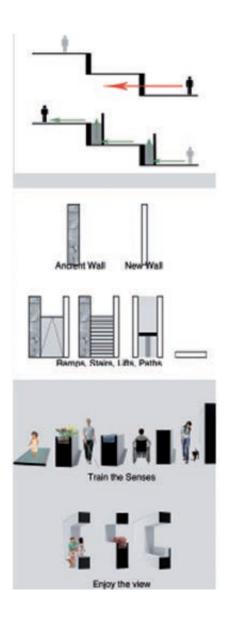


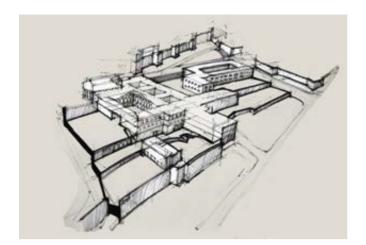


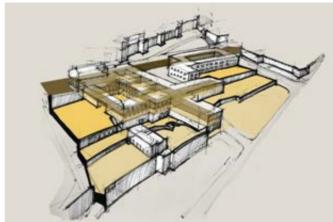
G9 Tudor Costachescu Nabil El Schami Mariana Santana

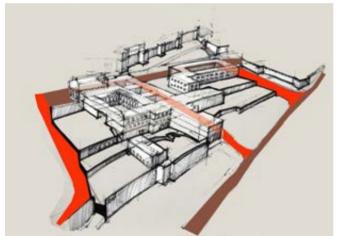
# Locus layer





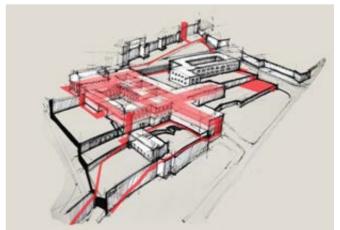




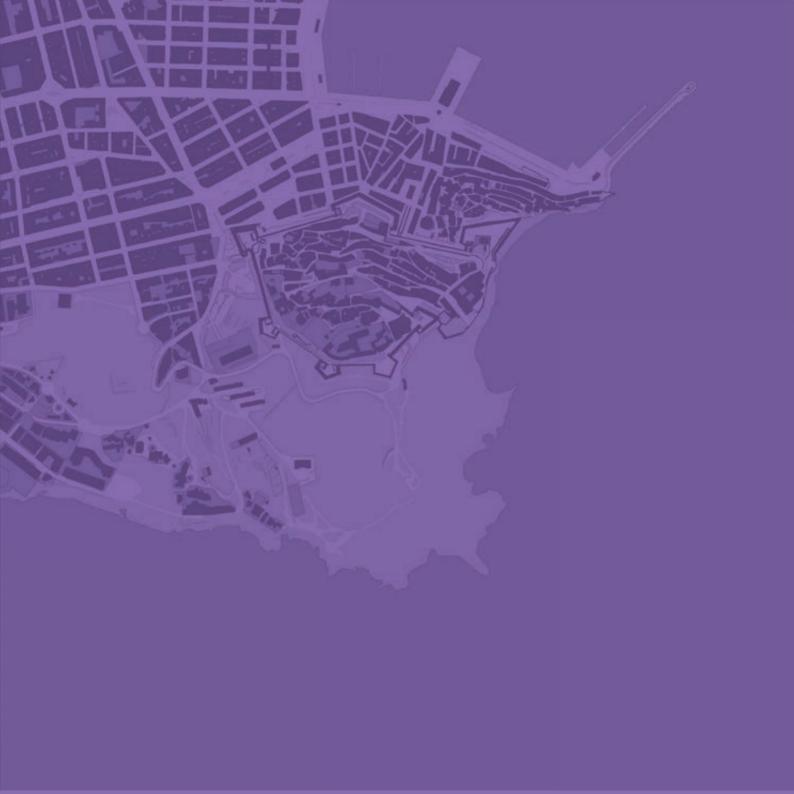








# April 2010



## PARTICIPANTS



ENSAM (Montpellier, France)

Prof: Ankel Cérèse

Fany Cérèse

Stud: Joana da Silva Tomás

Antoine Dubois Louiza Fergani Julie Lombard



JADE - HS (Oldenburg, Germany)

Prof: Holm Kleinmann

Stud: Marlene Brudek

Angsar Czerwinski Sérgio de Sá Tim Kalka



LTH (Lund, Sweden)

Prof: John Cramer

Stud: Caroline Dieden

Ida Hammarlund



PK (Krakow, Poland)

Prof: Hanna Grabowska-Palecka \*

Kinja Racon-Leja

Stud: Dariusz Florczak

Dominica Kowacz Barbara Kubicka Filip Piwowarczyk



UAUIM (Bucuresti, Romania)

Prof: Vlad Thiery

Elena-Codina Dusoiu

Stud: Alexandra Berdan

Mara Bogoescu Rares Dragoiu Olivia Parvu



UNIRC (Reggio Calabria, Italy)

Prof: Valerio Morabito

Daniela Colafranceschi

Stud: Francesca Caponera

Claudia Corapi Simone Pizzi Gaia Tribulato



UPC (St. Cugat del Vallès, Spain)

Prof: Marta Bordas

Miguel Usandizaga

Stud: Alba Guillen

Berta Morata Santiago Pérez Rubén Sesé



JTL (Lisboa, Portugal)

Prof: Carlos Lameiro \*

Pedro Rodrigues

Stud: Carlos Aragao

Ana Bruto da Costa

Hugo Maia Joao Moreira

## SPONSORS







Àrea de Salut d'Eivissa i Formentera







Prof: Markku Hedman \* Anna Helammaa

Stud: Juuso Heino

Tapio Kangasaho Sini Kotilainen Hanna Sivula

\* Couldn't attend the workshop due to the eruption of the volcano Eyjafjallajökull (Iceland), which caused enormous disruption to air travel across western and northern Europe over several days in April 2010, coinciding with their expected arrival at the workshop

## EXTERNAL CONSULTANTS

Francesc Aragall\_ Pres. Design for All Foundation

Stefano Cortellano\_ COAIB architect

Gonçalo Jorge\_ UTL architect, researcher

Carlos Mourão\_ UTL architect, lecturer, researcher

Raimón Ollé\_ Ibiza City Council architect

Salvador Roig\_ Architect

Elías Torres\_ UPC Prof. architect

# HEDULE 11th April- 25th April 2010

April 11th (foreign participants arrive)

April 12th (working place will be COAIB)

9.30h Opening ceremony

11-12h Lecture Historic evolution of Ibiza. by Elías Torres

12-13h Lecture Design for all concept, by Francesc Aragall

16-19h Accessible Visit

April 13th

11-12h Lecture LOCUS-Ibiza Presentation & LOCUS previous results, by Marta Bordas

16-17h Lecture **Public**, sense & space, by Carlos Mourão

17-19h **Guided tour in Dalt Vila,** by Municipality of Ibiza

April 14th

16-17h Lecture **AEVehicle**, by Miguel Usandizaga

17-18h Lecture Architecture, sense, body and peception, by Gonçalo Jorge

April 15th

09-19h Working time

April 16th

10-11h Lecture Study of pavements in Dalt Vila, by Stefano Cortellano

11-12h Lecture A centre for social therapy for people with special needs, Romania, by Elena-Codina Dusoiu

April 17th

09-14h Working time

16-19h 1st Proposals presentation





April 18th

Visits and architectural sightseeing around Ibiza + free time

April 22th

09-19h Working time

April 19th

10-11h Lecture **Accessibility in urban desing and architecture,** by Fany & Ankel Cérèse

April 23th (jury session, awards and recommendations)

09-14h Final presentation projects

16-19h Jury deliberation20h Awards ceremony

April 20th

09-14h Working time

16-19h Projects discussion

April 24th

Farewell party

April 21th

16-17h Lecture **Vernacular architecture of Ibiza and Formentera,** by Salvador Roig





## 

Ibiza, officially Eivissa in the Catalan language, belongs to the Balearic Islands located in the Mediterranean Sea. The capital city of the island is called Vila d'Eivissa, or simply Vila. UNESCO classified the historic centre of Ibiza -called Dalt Vila by the Catalan islanders- as a World Heritage City in 1999, especially mentioning the Cathedral and the medieval wall. It is an attractive city, famous for its bars, terraces, shops and beaches; its main economic activities are based on 'party' tourism. However, the local government and administration are trying to encourage a more cultured and 'quiet' tourism scenario, hoping to attract a more varied type of tourism. Demographically speaking, Ibiza displays a very peculiar exponential growth: According to the 2001 national census, Ibiza had 93,000 inhabitants (versus 76,000 in 1991, 64,000 in 1981, 45,000 in 1971, and 38,000 in 1961). However, two years later, this figure jumped to 108,000 (Govern de les Illes Balears - IBAE 2004). In a surprising contrast, we find that the historic centre Dalt Vila is practically uninhabited.

**Task**: To design a link as a universally accessible pathway, connecting the historical city centre Dalt Vila with the modern city located along the harbour at sea level.

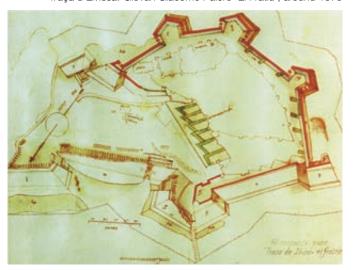
**Tracing:** The link layout has to be decided by every workgroup. Workgroups are allowed to work on the hypothesis of connecting the old city directly to the new city (North direction) or creating a new entrance at the South part of the city occupying the unused cliff facing the sea.

#### Objectives:

 To improve the general connections of Dalt Vila and the accessibility of its urban areas by promoting universal design strategies for its streets and landmarks.

HISTORIC MAPS

Traça d'Eivissa. Giovan Giacomo Palero 'El Fratiu'; around 1579



Eivissa i els seus voltants; Juan Ballester, 1752



- To study the main access points for connecting the historical centre Dalt Vila with the modern city outside the Roman walls: The aim is to ensure the inhabitants and visitors' mobility by means of universally accessible pathways.
- To develop slope and pavement maps of the urban space: The aim is to detect those inaccessible points where it is necessary to eliminate basic architectural barriers and/or design strategic interventions.
- To identify the main public buildings and tourist attractions where it is necessary to ensure equally accessible public areas, avoiding alternative and segregated paths when possible.

Mechanical systems: The use of different mechanical systems to transport people (lifts, movable platforms, mechanical ramps or stairs, etc.) has to be decided on by every student working group.

Eivissa; Francisco Coello, 1850



Aerial photograph; 1956



## PROPOSALS





G3

Mara Bogoescu Ansgar Czerwinski Caroline Dieden Hugo Maia Santiago Pérez

## Trojan Connector

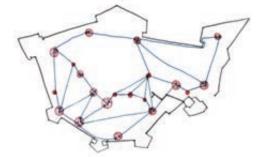
The proposal generates an internal route, placing lifts in existing unused buildings and creating new activities.

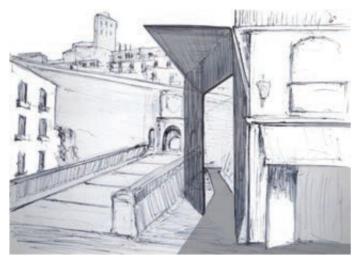
The intervention maintains the facades, creates new lifts as towers and places WC and other services inside the buildings. There is maximum respect for the existing atmosphere. Only the lift towers emphasize the place; the accessible architecture has been added as a new layer.

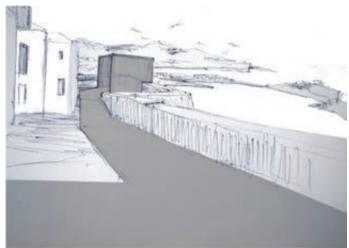
Intervention map

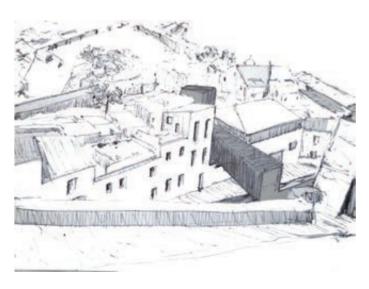


Future scenario







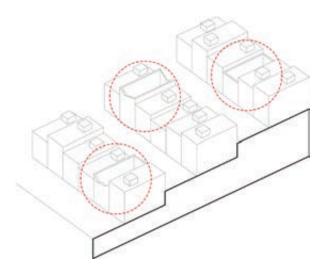


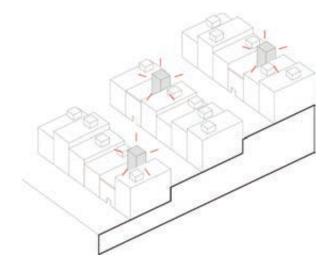


#### STRATEGY

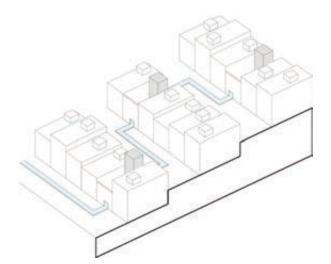
1. Detection of unoccupied houses



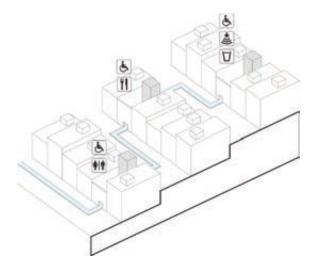




3. Continuous pavement treatment



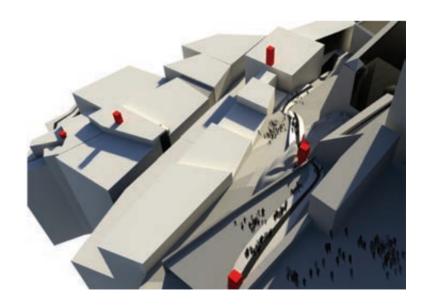












# 2nd prize



G2

Alexandra Berdan Francesca Caponera Berta Morata Hanna Sivula



## Re-connect, re-order, re-design

We see the wall as a connection between all the historical parts of Dalt Vila, and all the different places inside the city.

Our proposal improves the accessibility between the horizontal main streets; it makes use of some empty spaces inside the city, it creates new public spaces, it makes almost all the important buildings and places in Dalt Vila accessible.

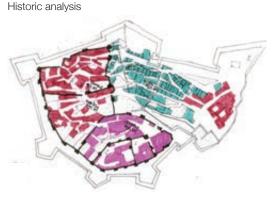
Our proposal includes two routes:

- One that reaches the top directly by a lift.
- One that reaches the top step by step.

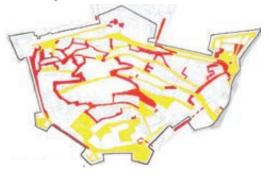
We propose a new kind of pavement, a tactile pavement, accompanied by a strip of pavement lights, that will make the route extremely easy to follow for everyone, especially blind and visually impaired people.

In the buildings that are integrated into the project, we propose new public uses —an information point, a bar, cultural spaces, galleries.

The new relationships that are made through the project generate new activity areas, new public spaces, and new points of interest.





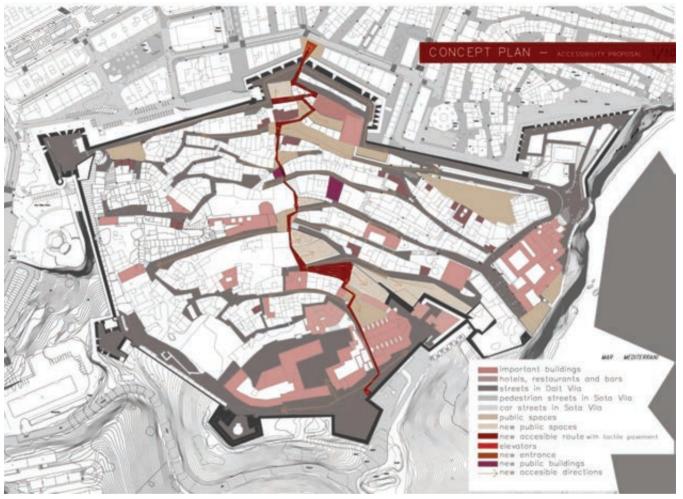


Connections

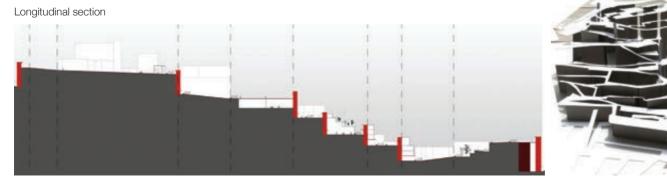
Accessibility after intervention



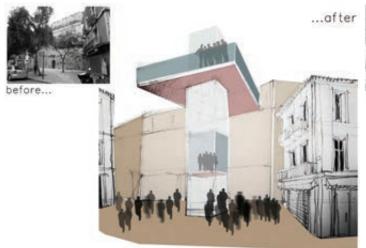
#### Concept plan

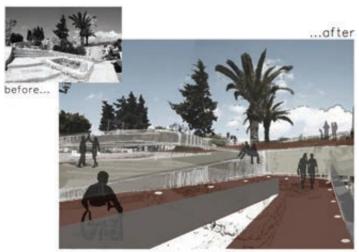


## Concept model



#### INTERVENTIONS



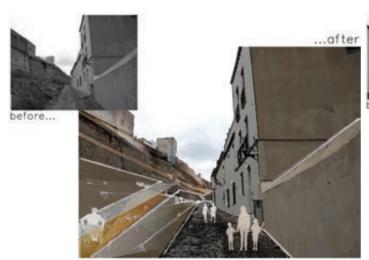














# 3rd prize



G4

Ana Bruto da Costa Louiza Fergani Alba Guillen Sini Kotilainen Barbara Kubicka

## Wall side story

Once upon a time, there was a big defensive wall built to protect the medieval city of Ibiza from enemies. Nowadays, it is still an unconquerable fortress, although there are no enemies anymore. People with different kinds of disabilities cannot easily enter the city because of the many obstacles they meet on their way.

The Wall Side Story shows us how to discover this city from different sides: Externally, inside the wall and inside the city —without any boundaries.

#### STRATEGY

No connections

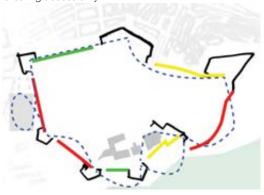


Breaking the wall



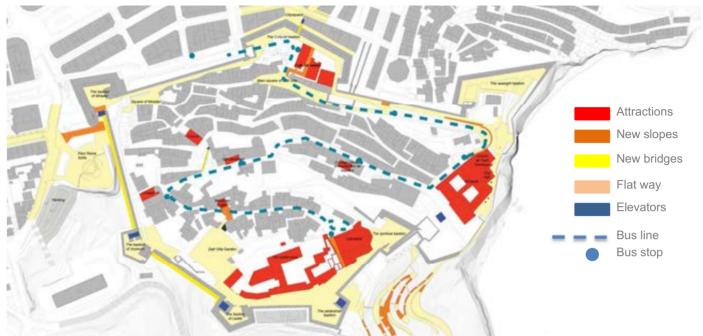


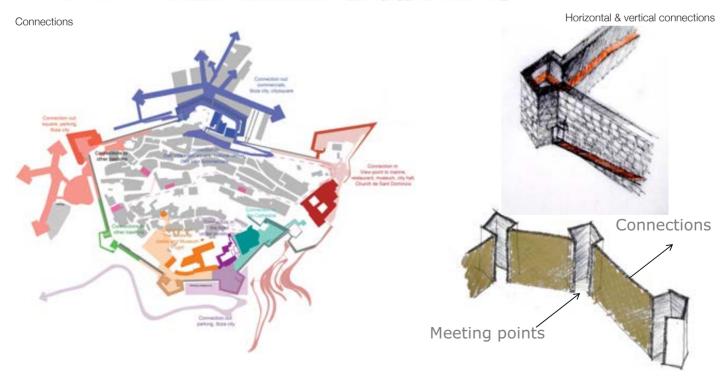
Creating accessibility



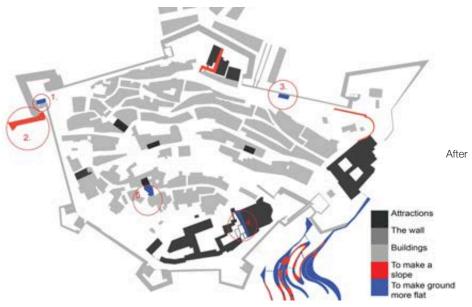
Through the bastions





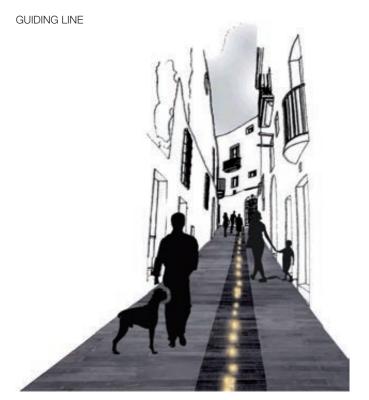












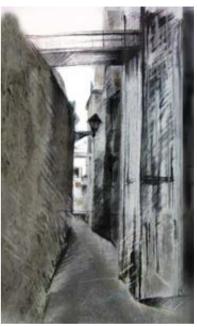


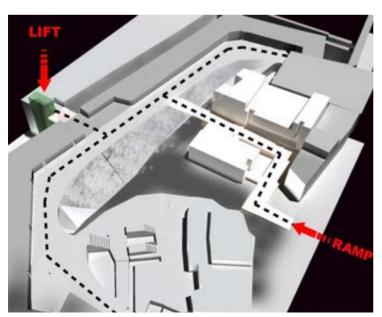


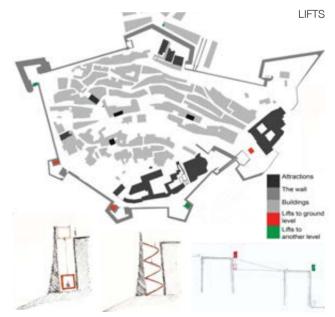












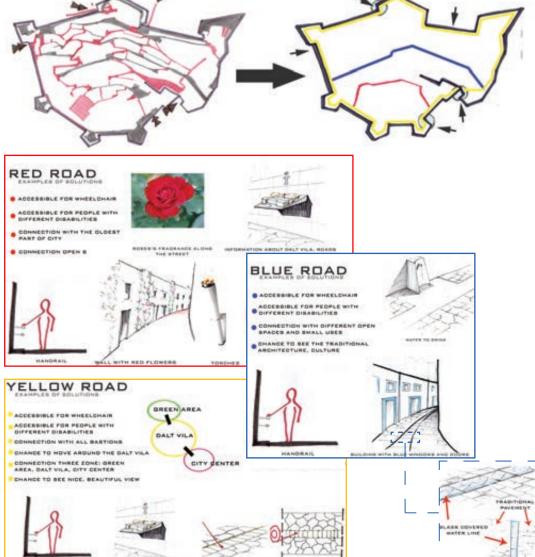
Unaccessible

Sérgio de Sá Dominika Kowacz Joao Moreira Ruben Sese



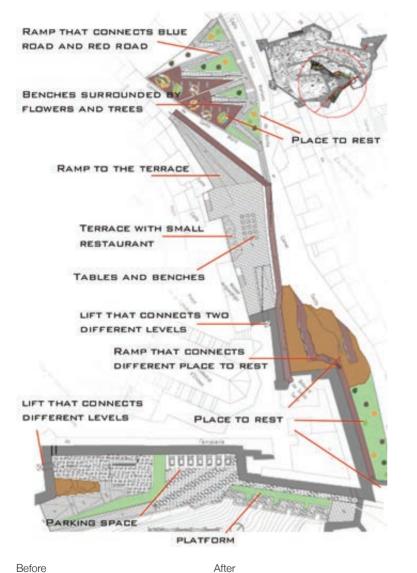


Let's Open the Circle for Us



Accessible

PROSESSOT WITH MATER















# Touched by the water

Concept



Claudia Corapi Antoine Dubois Dariusz Florczak Juuso Heino



Logo

## CONCEPT

A path along the flat streets in Dalt Vila, and fine connections by means of lifts.

## SERPENT ROUTE

- For motorcycles
- Accessible to everyone

## **BASTION CIRCLE**

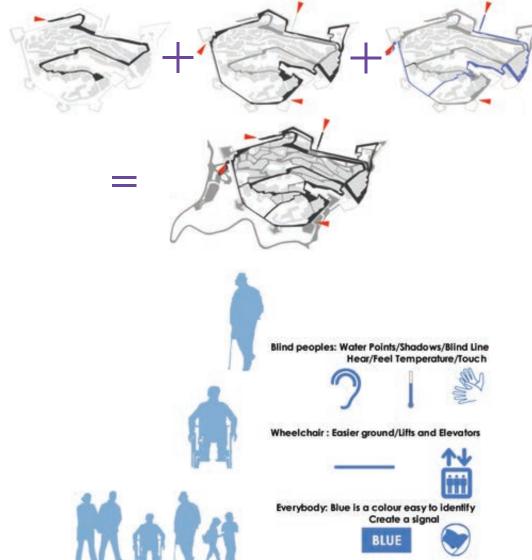
- To make all paths accessible
- To sightsee

## THE STREAM

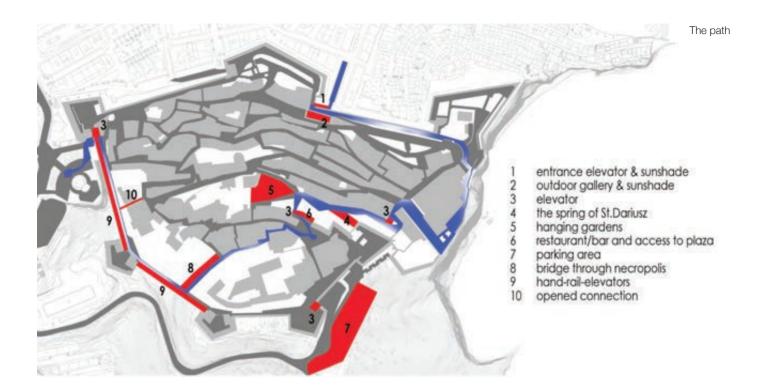
- To make all paths accessible
- To orientate and feel Dalt Vila

## CHOOSE YOUR WAY!

- Network of accessibility
- Getting from one point to another



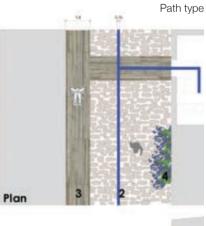
150 | IBIZA

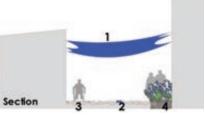






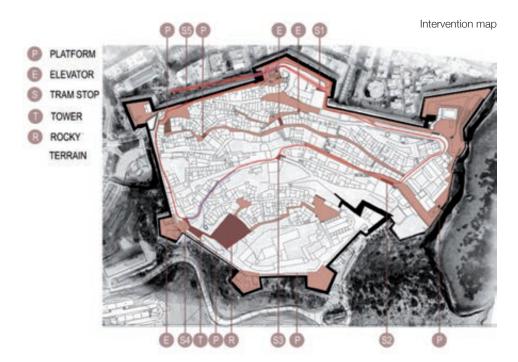






## G6 Carlos Aragao Joana da Silva Tomás Rares Dragoiu Tim Kalka

# Quality living for all













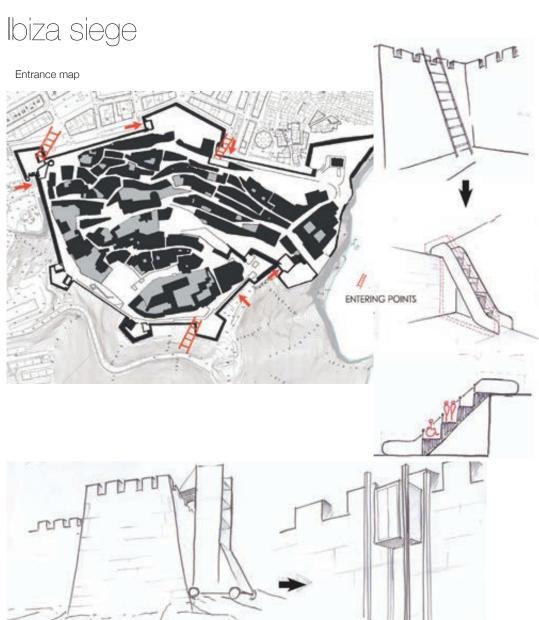






Tapio Kangasaho Julie Lombard Filip Piwowarczyk Gaia Tribulato





Intervention map City views











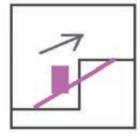


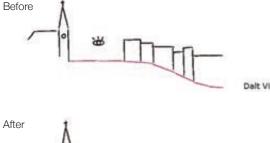
G8

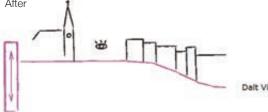
Marlene Brudek Ida Hammarlund Olivia Parvu Simone Pizzi

## Over the wall

## Concept





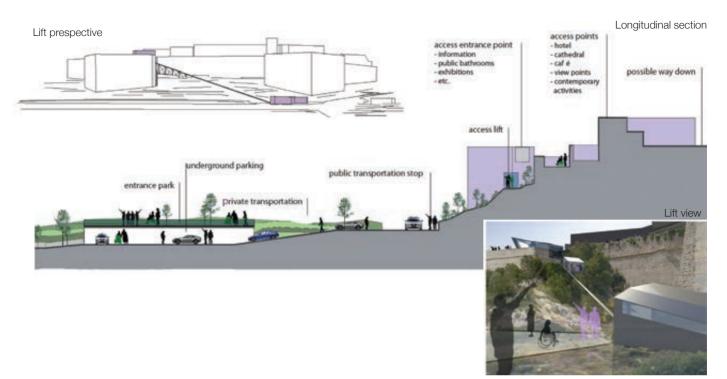


## Intervention plan



## CONCEPT

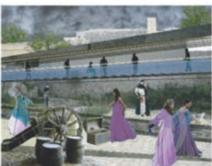
Most tourists come in summer. We want all people to enjoy the great view, go into the cathedral, the museum or the hotel, and this is possible by a new lift built as a new entrance to the city, which allows to rapidly reach the highest pont og the city where all the most interesting places are located. Whereas in the old city, we only provide discreet support elements to assist the journey.



View from the parking park



Balcony view over contemporary festival



New accessibility in old streets



New combined ramp & stairs



View towards wall



Benches and new paving in the south wall



Way down with handrail



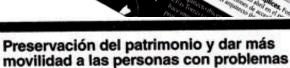
# PRESS REP

# Futuros arquitectos de toda Europa idean mejoras de acceso a Dalt Vila Una treintena de estudiantes participan en Elvissa desde ayer en un programa Erasmus que pretende hacer accesibles los núcleos históricos de las ciudades

UN EJÉRCITO ARMADO CON AUTOCAD





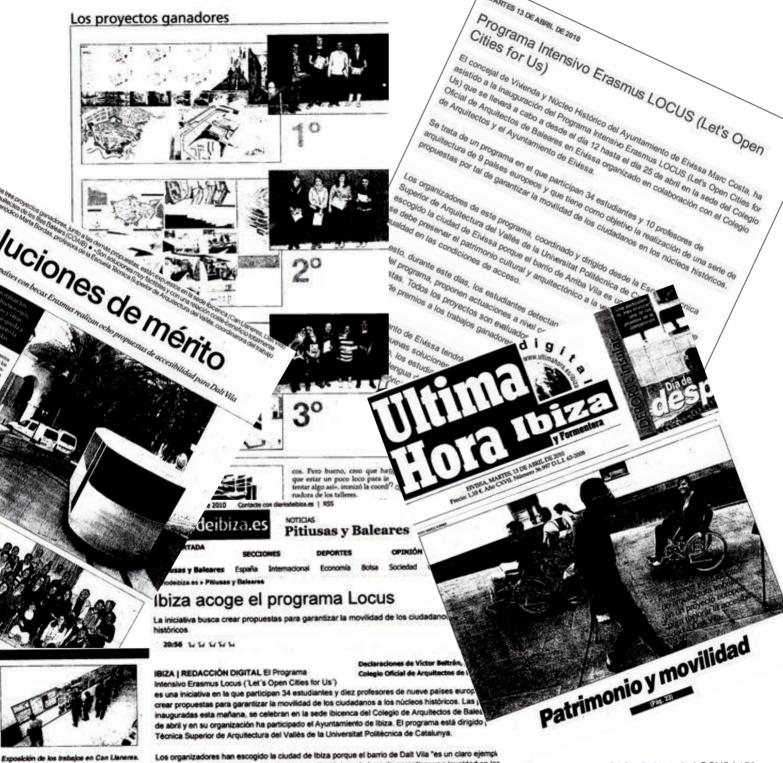


de las ciudades».

Objetivos a los que hay que sumar un problema que cada vez será más frecuente: el envejecimiento de la población, con lo que ello supone de limitación de su movilidad a la hora de acceder a tiertos lugares, como la empinada Dalt Vila.

Por lo tanto, se impone buscar soluciones; como la que el arquitecto ibicenco Elias Torres realizó en el casco histórico de Toledo: una escalera mecánica cubierta. Solución criticada al principio por algún sector de la población, pero que cada vez cuenta con más 'clientes' satisfechos.





Los organizadores han escogido la ciudad de titiza porque el barrio de Dait Vita "es un ciaro ejempa se ha de preservar el patrimonio cultural y arquitectónico a la hora de garantizar una igualdad en las condiciones de acceso", según asegura en un comunicado el Ayuntamiento.

# 

The great interest in LOCUS IP lies in having several people from varied and different backgrounds working toward a common purpose: to improve the global accessibility of a city. The intensive character of the programme gives time only for detecting where the inaccessible points are, but not for working on them in detail. However, it is worth remarking how most students agree on the location of the inaccessible areas –commonly called 'dark points' by the participants– as strategic points for intervention, which stimulates brainstorming for a further detailed project. Indeed, the LOCUS team is proud that after each workshop several students decided to develop their Master's Thesis Project by working on different LOCUS 'dark points'. This has provided a full account of possible solutions and generated projects of remarkably great interest to local authorities for their architectural value.

In addition, it is also worth noting how students that participated in one of the LOCUS workshops, have afterwards achieved outstanding results in the Schindler Award; the European architectural competition aimed at 'Access for All', where many of the LOCUS partners had the opportunity to meet. In conclusion, LOCUS is satisfied and convinced that educational activities such as the ones promoted in this Intensive Programme have proven to be highly beneficial for educating architects as well for increasing their future work opportunities.

# TARRAGONA SPAIN

CARLOS VIDAL | UPC 2008

Study for the accessibility of the pedestrian route from Plaça de la Font to the Cathedral in Tarragona

LAURA PADRÓS | UPC 2010

Public facility on Tarragona's old quarter



SERGIO GARCÍA | UPC 2012

Project ATH (Accessibility, Topography and Heritage)

CARLES TUCA | UPC 2011

Socio-cultural centre in Girona's old quarter



EVA PÉREZ | UPC 2009

Inclusive UÉvora

# Master's Thesis Projects TARRAGON/







Carlos Vidal EPSEB-UPC | 2008

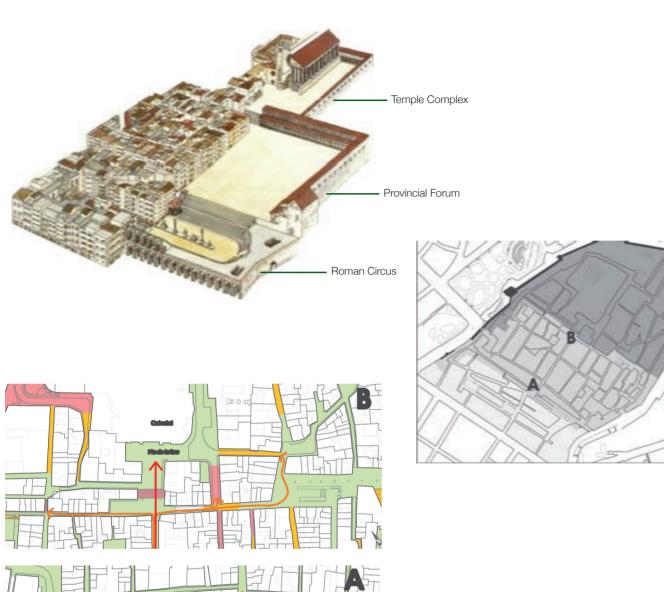
PREMIO PFC - FUNDACIÓN UNIVERSIA: award given to students of the UPC for projects offering improved accessibility and inclusion of disabled people.

# Study for the accessibility of the pedestrian route from Plaça de la Font to the Cathedral in Tarragona

The historical centre of Tarragona was built on three great platforms of the Roman Empire period: the Roman circus, the Provincial Forum and the Temple Complex. Each one of these platforms is located several meters above the other one, respectively, generating two greatly uneven heights where they encounter in the form of highly steep streets or steps. The study consists of two major interventions in the encounters of these platforms:

A) The first one is located between the levels of the ancient Roman Circus and the Provincial Forum, in the street called Baixada de la Misericòrdia, which has a steep slope, over 20% inclination. This condition leads to the proposal of installing a big cabin lift in the interior of an existing building located exactly in the boundary between the two mentioned platforms. The project consists of removing the existing floors and building a new one at the same level as the upper street, which will be connected by the lift to the new entrance at the lower street. The facades are integrally preserved, except for the upper floor, which is replaced by an attic window, providing additional illumination. This becomes recognizable from the outside as an 'accessible path'.

The second one is placed between the intermediate levels of the Provincial Forum and the upper area corresponding with the ancient worship enclosure (the Temple Complex) in the street named Pare Iglesias. This street, although not being as steep as in the previous case, also has a notorious slope, over 10% inclination. Considering that it is not possible to modify the slope without interfering with the current entrances to the various houses and/or commercial premises on the street, a new ramp with a gentler slope is incorporated in redesigning Placa dels Cabrits, a somewhat unused square next to Pare Iglesias street.

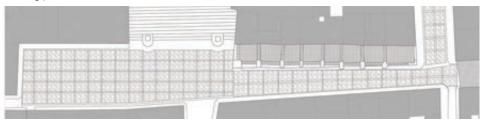




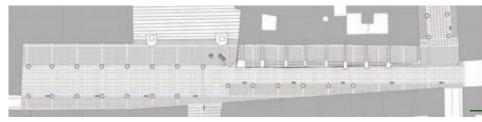
Accessible <6%
Difficult access 6-12%
Non accessible >12%

## SANTIAGO RUSSINYOL SQUARE

## Existing pavements



Pavement proposal



BAIXADA DE LA MISERICÒRDIA STREET



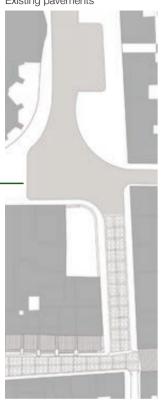
Existing pavements



PARE IGLESIAS STREET

Existing pavements

Pavement proposal

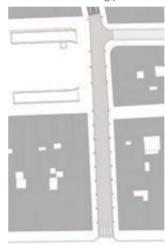


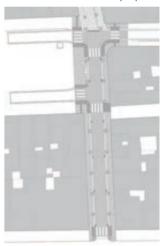


Existing pavements

PORTALET STREET

Pavement proposal





Pavement section

1% 5cm 1% 1%

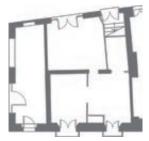
Existing floor plan

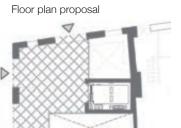
SECOND FLOOR Floor plan proposal

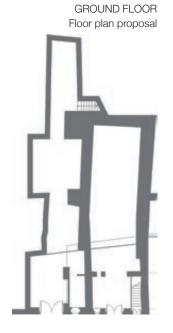




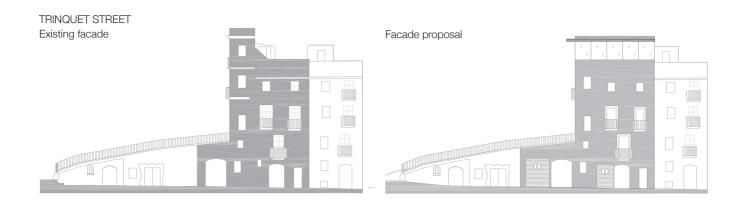
FIRST FLOOR Existing floor plan



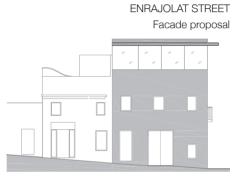


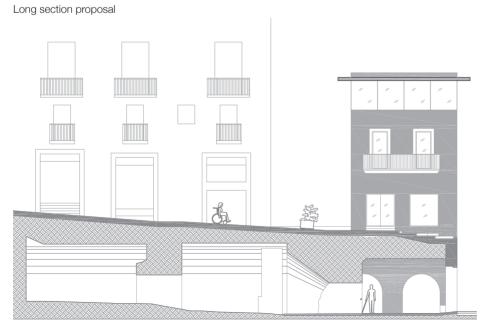


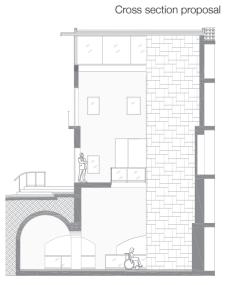
Existing floor plan













Laura Padrós ETSAV-UPC | 2010

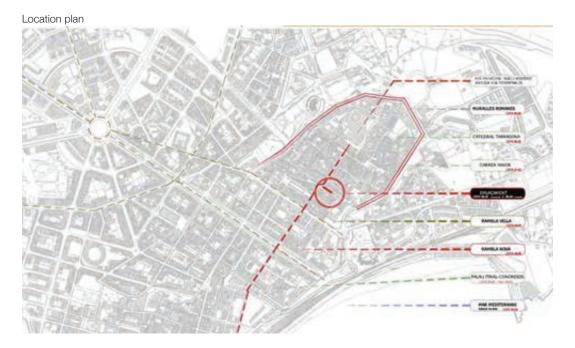
# Public facility in Tarragona's old quarter

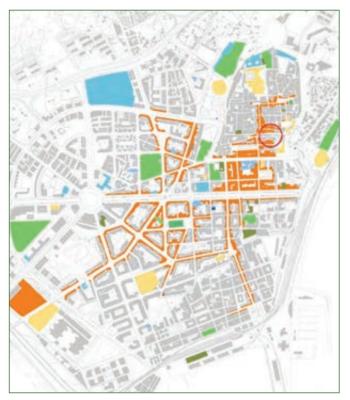
The project is located in the juncture between the levels of the ancient Roman Circus and the Provincial Forum, in the street called Baixada de la Misericòrdia. The proposal consists of demolishing the existing derelict buildings of the site in order to construct a new building able to meet the demands of the neighbourhood while also taking the opportunity to install a public lift, which is hidden inside the building but open to external users.

After analyzing in detail the area's uses, needs, existing facilities and inhabitants, it was finally decided that the new building should be a care centre for the elderly. It is important to note that the people who live (especially home owners) in

Tarragona's historical centre are ageing in general. What's more, the buildings are, overall, remarkably old. Many of them cannot have a lift installed because of space and/or structural issues.

Concerning urban connections, the proposed intervention offers a double solution, thanks to the sufficient length of the building site: at one end, a public lift is provided to quickly overcome the current barrier that represents Baixada de la Misericòrdia street, while at the other end a public park is created with soft ramps for easy access.









Tourist info points

Churches | Monuments Commercial buildings

Leisure buildings

Health centers

Schools

University centers

Markets

Senior houses

## ACCESSIBILITY MAP

High difference

Accessible slope <6% Insufficient slope 6%-12%

Inaccessible slope >12%

Pedestrian access stairs

Pedestrian access

Car access

Bus stop Parking

Taxi stop

Mobility plan for Tarragona's High part | car restriction

Site plan



## **URBAN SURROUNDINGS**

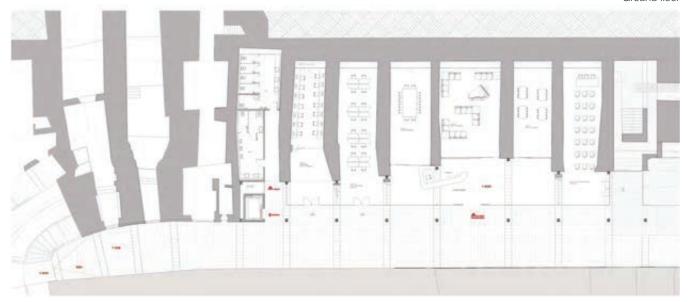
## First floor

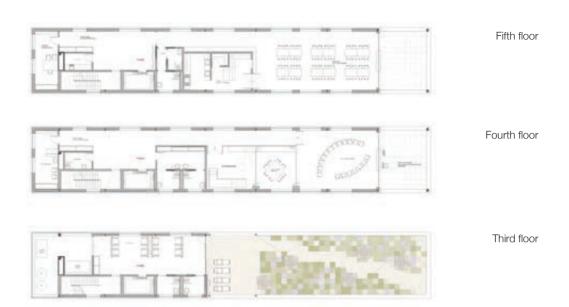


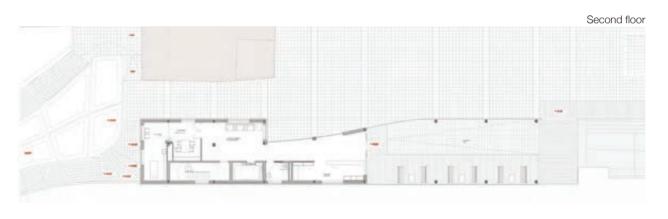
## Ground floor

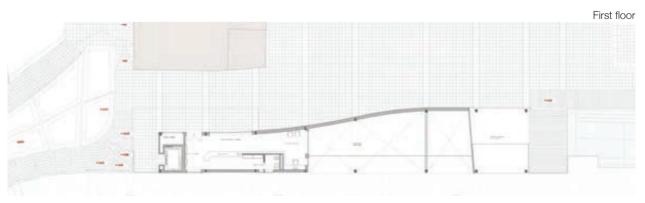


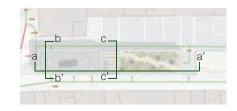
## Ground floor











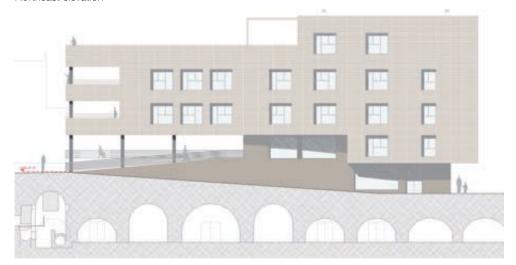
FACADES
Southwest elevation



Southeast elevation



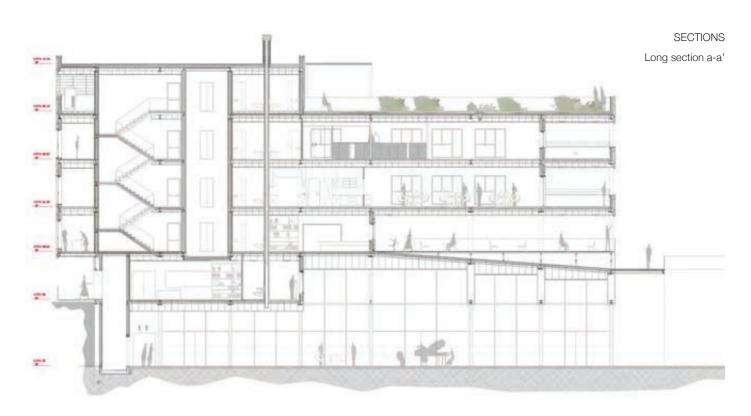
Northeast elevation



Northwest elevation



176 | MASTER'S THESIS PROJECTS





# JRONA Master's Thesis Projects



## st prize SCHINDLER ESPAÑA 2009



Sergio García ETSAV-UPC | 2010

FTSAV CATEGORY- SCHINDLER ESPAÑA: award given to the best Master's Thesis Projects in order to represent ETSAV in the National competition of the Schindler award.

The SCHINDLER ESPAÑA award is given to the best projects selected by the main Architecture Schools in Spain for proposed projects that promote concepts of quality, innovation, originality or creativity in solutions for vertical communication with a relevant improvement in accessibility.

# Project ATH (Accessibility, Topography and Heritage)

The topography of Girona is guite steep and complex, which translates into large presence of steep streets, some of them with stairs. This generates several architectural barriers to be solved. Close analysis of the city's layout reveals an irregular growth towards Sant Pere de Galligans: a steep area located in the north part of the city, beside the Cathedral, which has always been disused due to its cliff-like character. It ends abruptly rather than continuing to expand from the historic centre. This peculiar character verifies the existence of a 'dark point' where an intervention is required.

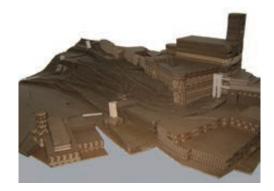
The porposal considers a global intervention in the public space of this area to solve the global accessibility of the site, giving access to its main heritage -the Cathedral and the Medieval walland regaining the adjacent green areas, which are currently forgotten as residual space.

The project consists of connecting, by means of accessible itineraries, four new strategically located lifts: the first lift is the object of the restoration of Casa Campaner, which will give new access to the Cathedral. It avoids the current access through steps by creating a new public use of the building. The second one is located at the adjacent public garden, Passeig arqueològic, allowing access to its several terraces. Finally, the third and fourth lifts are installed in the forest area nearby, creating a green link between Montjuïc in the upper ancient area and John Lennon gardens, at the lower part of the recent city expansion.

This proposal takes the opportunity to use a waste area and create continuity in the city by offering direct access to the historic city centre.

Model photographs





### Analysis





Accessibility schemes

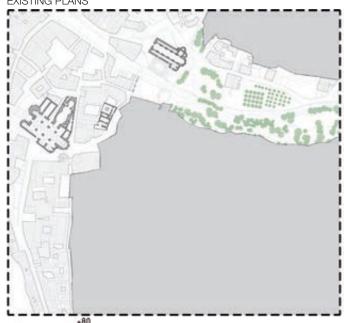






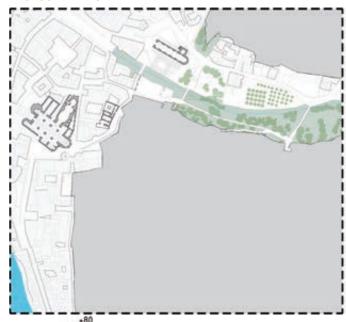


### EXISTING PLANS





### PROPOSAL PLANS





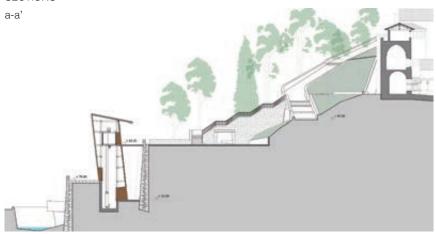


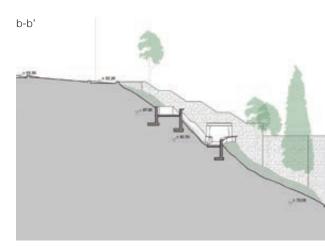


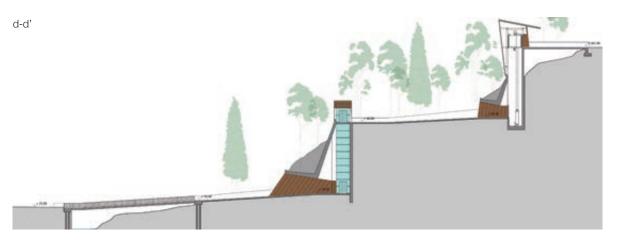


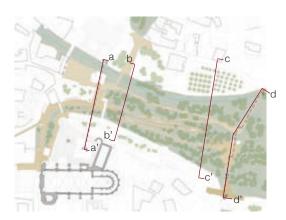


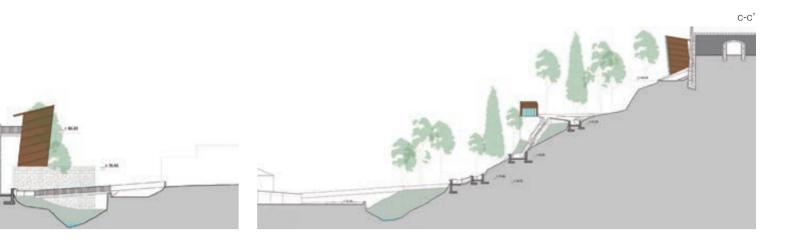
### SECTIONS















Carles Tuca ETSAV-UPC | 2011

### Socio-cultural centre in Girona's old district

According to the analysis of the city, the main outstanding points detected are: thematic public equipment spots, a central longitudinal degraded strip, lack of green spaces, large abandoned areas or ruined buildings and insufficient parking for the inhabitants. The urban proposal consists of three accessible paths that begin at one side of the river and end across the river at the old city centre's highest point. Along the paths two large green areas are created, consistently aiming to preserve the medieval landscape of the old quarter.

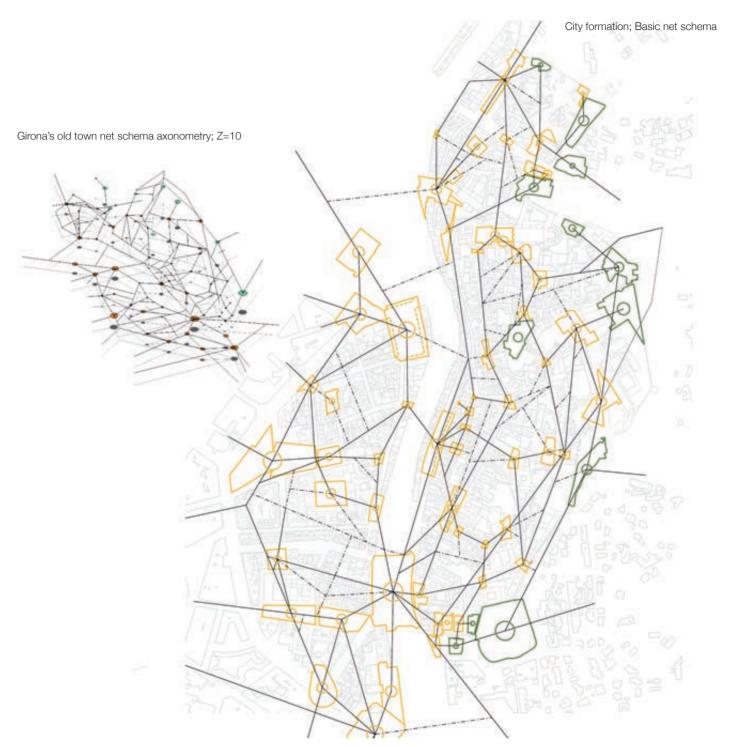
The project focuses on an eighteen-century mansion, which was once a small theatre. The new remodelled building is a civic centre, a cultural and social facility that becomes a powerful node of leisure and entertainment. It allows various activities, both public and private, and houses a civic and social centre, a cinema, a radio station and a few private offices dedicated to promoting film production in the city.

The aim of the project is to extend the public circulation by taking advantage of the built space to install mechanical systems of vertical connections. In this way, a continuous, fluid and accessible urban path is achieved by mechanically connecting two streets which are at different levels separated by approximately ten meters.

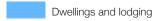
A new green square is constructed at the higher level street to create the new entrance to the building. The facades are rebuilt to accommodate the new use of the building while the original structural distribution is maintained to reflect the mansion's original character.



Model



### BARRI VELL I MERCADAL'S **ACTIVITY GRAPHIC**















### BARRI VELL'S TOURISTIC NODES GRAPHIC





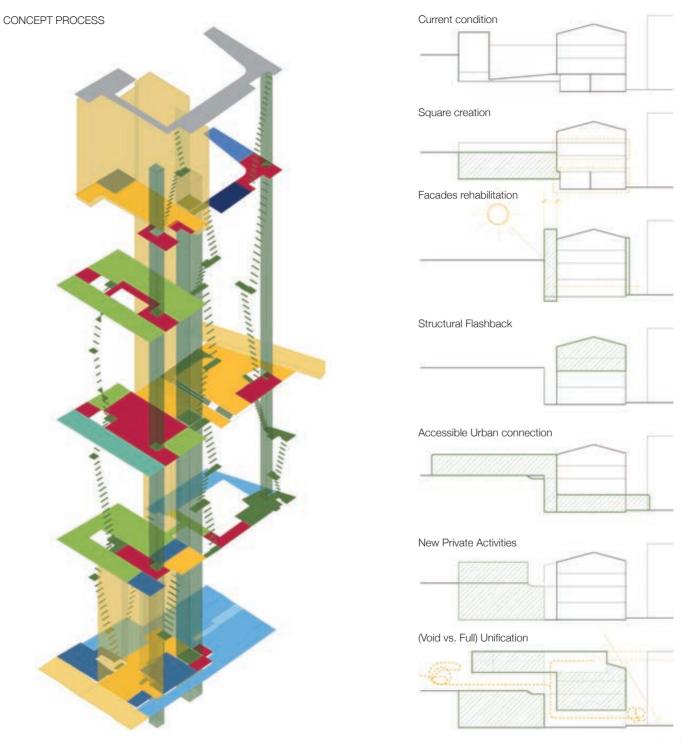
Public Space

### THREE PATHS PROPOSAL AND DRAWINGS





New Green Zone

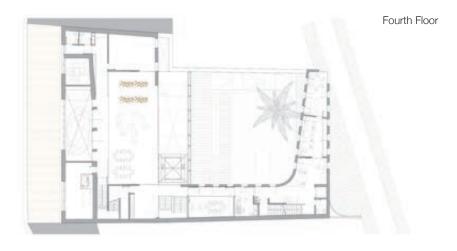




Social centre offices



Civic centre's main hall



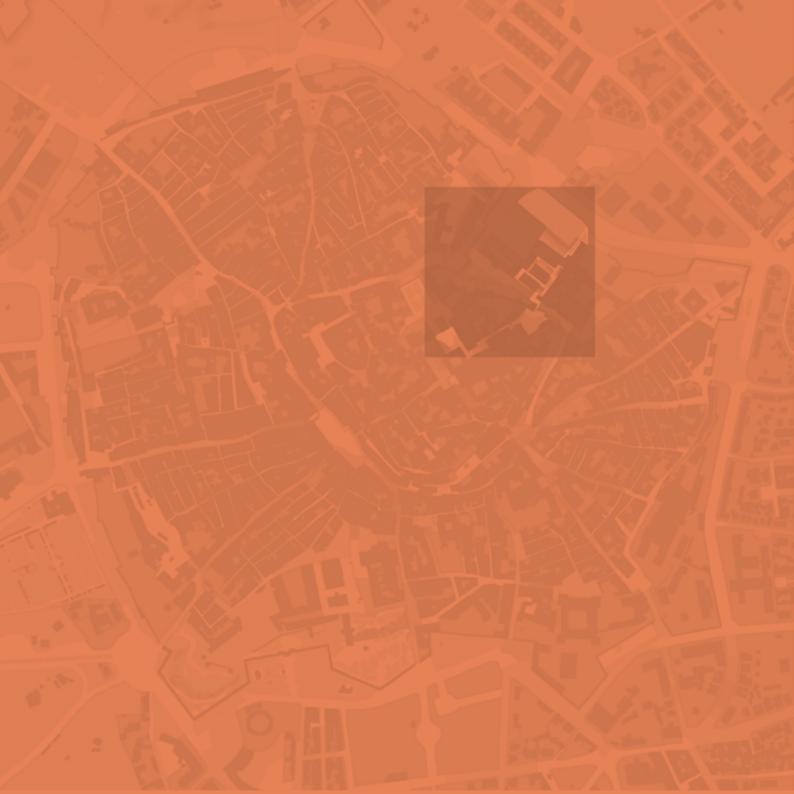




Ground Floor



# VORA Master's Thesis Projects





Eva Pérez ETSAV-UPC | 2011

### Inclusive Évora

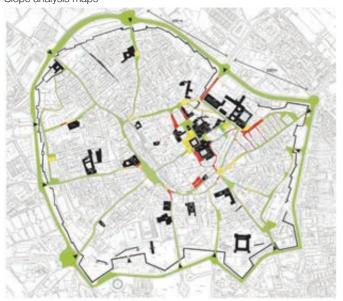
Évora is built on top of a hill and is surrounded by a Medieval wall. The topography of the city varies greatly in level, starting from +260m above sea level to its highest point at +300m. This 40m height difference in the historic centre translates into an urban space with many steep streets, some of them transformed into stairs. The hardest point to reach, and the most visited, is Diana Temple, which stands at the highest point of the historic centre. The University of Évora is identified as the most interesting site to be intervened, due to its strategic position between the Medieval wall at its highest point and the external circumvallation at the lower part of the city.

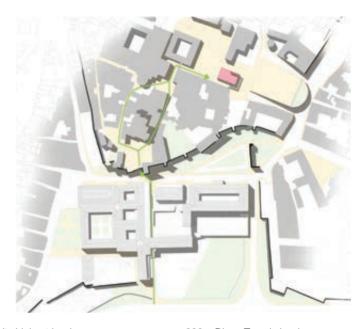
The project consists of opening the university's interior main circulation axis to the public, as a 24/7 open connection for the inhabitants with newly created public spaces and services –such as a library or a cafeteria– for the community. It is worth noting that the existing interior path of the university has a steep slope of around 20%, which is hardly practicable. So it is solved by installing interconnected lifts and mechanical ramps. Thus, in this way, an accessible itinerary is created that connects with a hidden lift in the Medieval wall across the upper street and finally ends at Diana Temple, the hardest point to reach in the historic centre.

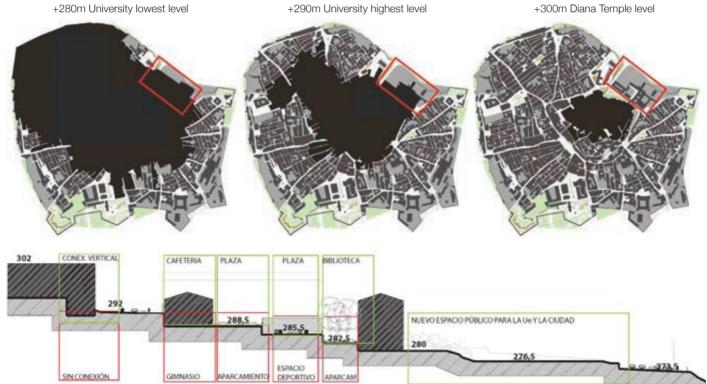
Model photographs



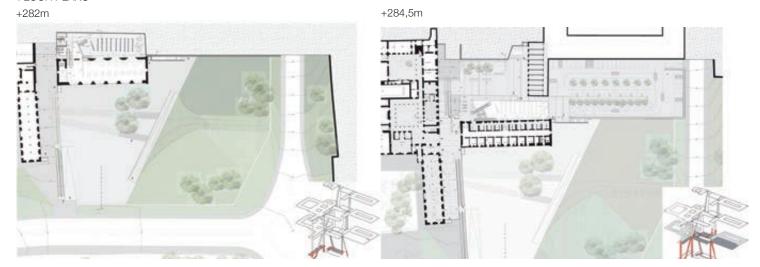
### Slope analysis maps



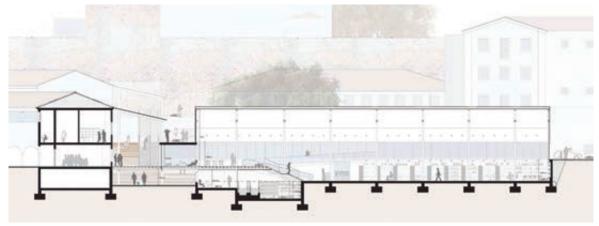




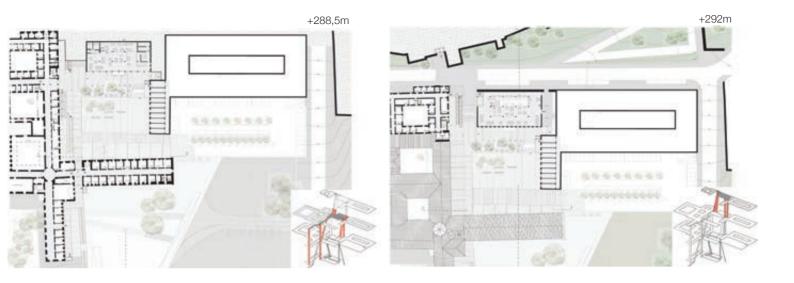
### FLOOR PLANS

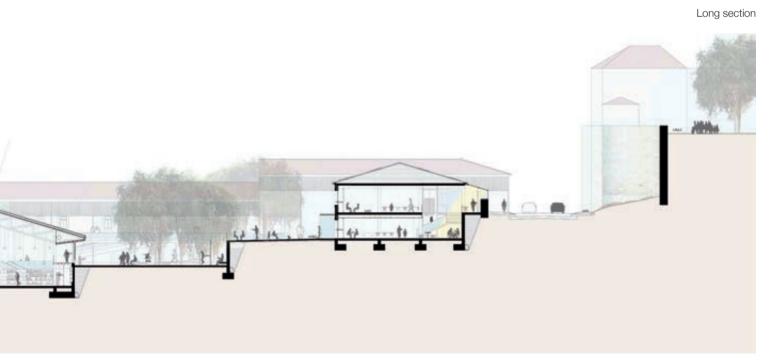


### Cross section

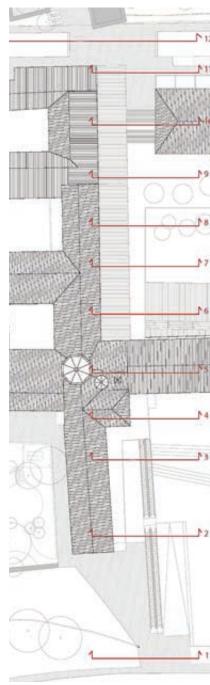






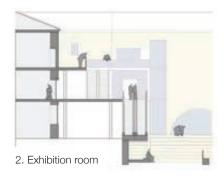


### SECTIONS LOCATION





3. Two platforms connected to university

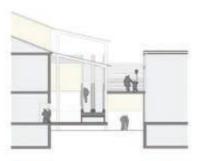




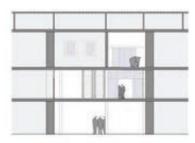
1. Starting point



7. Public square and theatre hall



6. Cafe square and cluster connection



5. Staircase to library square + connection between university and library

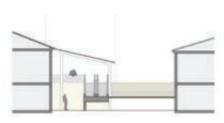


4. Access to the theatre and library square

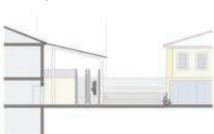




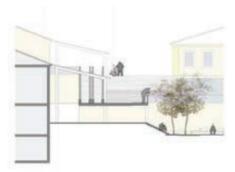
12. The final step: square with integrated lifts on the medieval wall



10. Ramp to the lift area

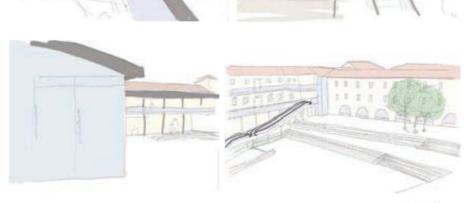


9. Cafeteria square



8. Library square access





### 

VIENNA 2008 - To reclaim the public ground

LOCUS Tarragona participants

MARINA BRUNO - LAURA PADRÓS - ADRIÀ VILAJOANA | UPC - SPAIN Following the water

MARC FARRÉS | UPC - SPAIN Sports center in Vienna

BERLIN 2010 - Olympic park Berlin

LOCUS Évora participants

HAYDAR ALWARD - MIKAEL PETTERSSON | LTH- SWEDEN

Made to measure

LOCUS Ibiza participants

FILIP PIWOWARCZYK - PIOTR PALUCH | PK - POLAND

Game of senses

FOLLOW-UPS LOCUS | 201

# VENINGIER Award 2008







Western part of the competition site with Vienna River canal and "Brücke über die Zeile".

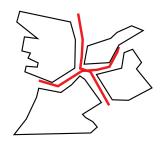






### Marina Bruno Laura Padrós Adrià Vilajoana ETSAV-UPC, Spain

Prof. Miguel Usandizaga Prof. Marta Bordas



Reprogramming the urban fabric at the junction between the Gûrtel and the Vienna River, using waterscapes as pedestrian-scapes

### Following the water

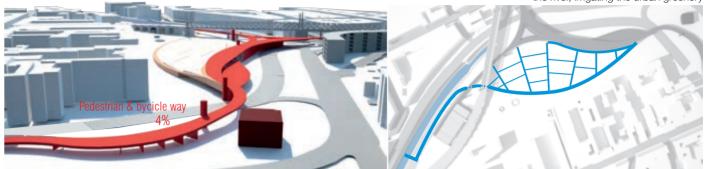
The project is located in the city of Vienna, at the crossing between the Vienna River and the Gürtel, the route of the old second wall. This is a knot where many different infrastructures impede pedestrian accessibility. Four districts converge at this point, but it has become a 'no man's land'.

The proposal seeks to reconnect the 4 residential neighbourhoods and achieve social and economic regeneration of the area through the construction of a high-level connection which follows activities along the route. It respects the natural patrimony of the site while also revitalizing this degraded area in order to generate a meeting space.



High way that connects the 3 metro stations with a slope of 4%

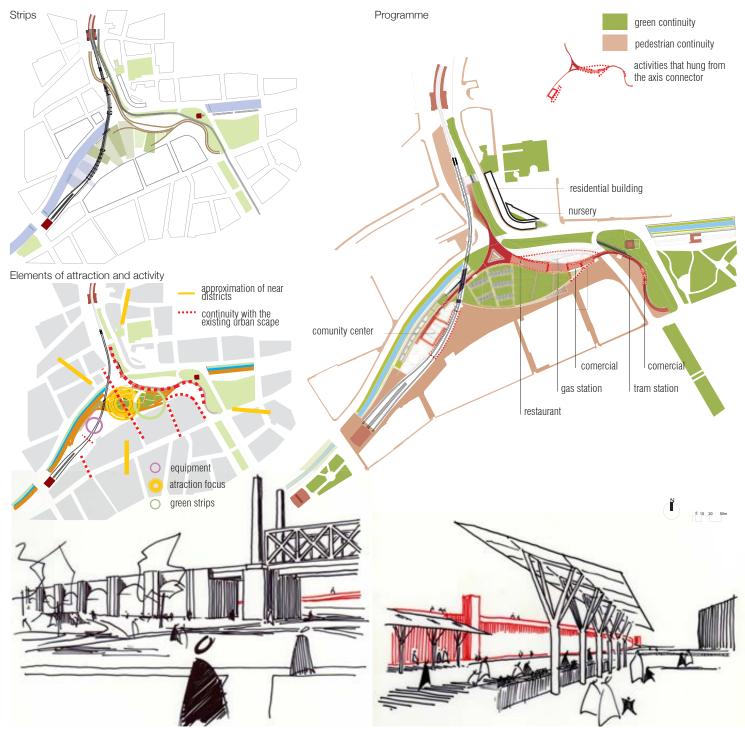
Track system that drains rain water and leads it toward the river, irrigating the urban greenery



### **BIOMASS & GREEN CONTINUITY**

Urban greenery acts as a landscape generator that favours the regeneration of the territory through different natural processes, such as phytodepuration

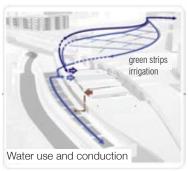


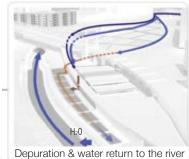


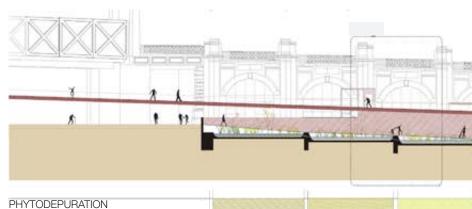


### WATER CYCLE







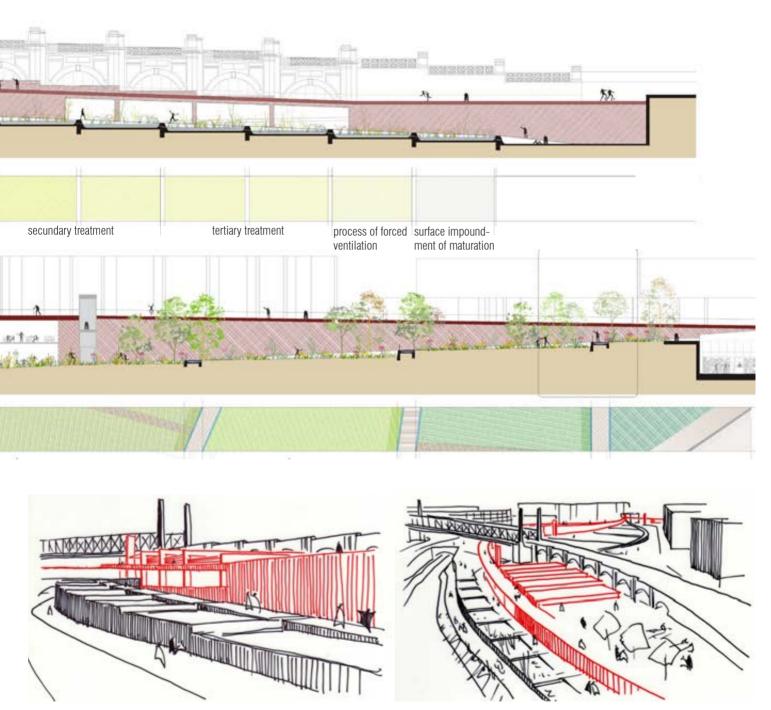


Urban waste water treated using plant-based techniques and surface impoundment



PHYTOREMEDIATION Urban wasteland treated using plant-based techniques and surface impoundment.









Marc Farrés ETSAV-UPC, Spain

Prof. Miguel Usandizaga Prof. Marta Bordas

### Sports center in Vienna

We are in front of a heavily disjointed location and a site being crossed by a series of infrastructures such as roads, railways and a canal. These problems generate such a lack of communication between the different parts of the urban plot and the high levels of noise. Initially, the project intends to link all parts of the surrounding neighbourhoods by using pedestrian bridges and tunnels. Otherwise, Otto Wagner's bridge, a potent structure that separates the east and west sides, is a good starting point to support the building and link it from both sides. As a result, we are going to achieve a unique urban fabric and a new neuralogic point.

The new building has a transverse section that benefits the different levels between the bridge piers and the canal. The bridge becomes an interior-exterior facade of the new building and the bridge arches are used to create the visitor access, a bar, a store and all administrative areas.

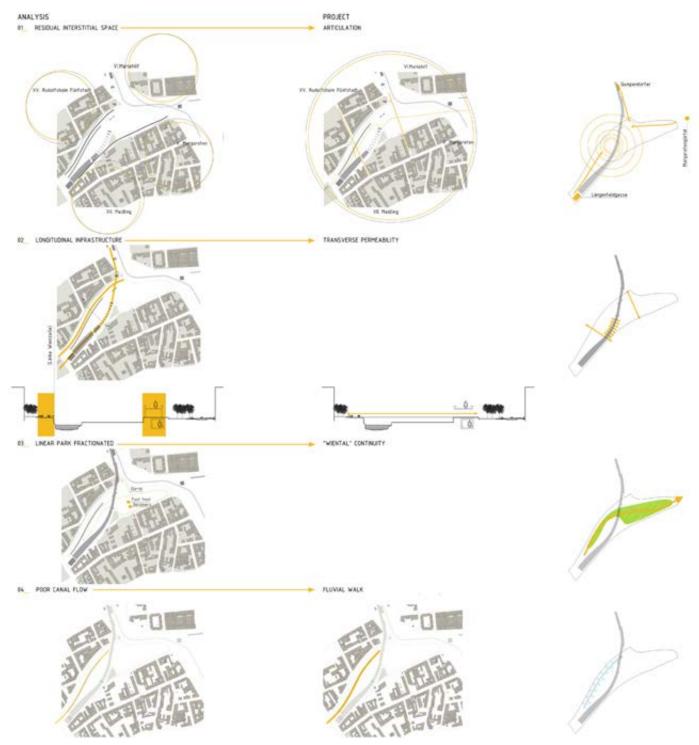
High stands are in this level and jut out above the level of the sports area. Under the stands there is a corridor that connects the changing rooms, the court and the swimming pool (with a separate path to the changing rooms). Sports enthusiasts and gym users can enter through different areas. After passing access control, they have a vertical connection that allows access to all the services, including the gym at the upper level. Here, various bodybuilding activities are located on different terraces connected by a softly sloped ramp.

Never forgetting the ever growing importance of the greenery, a large park was designed for activities such as volley ball or petanque, with a botanical garden as well as a widened canals of flown water and small dams, creating the sensation of a water park.



Aerial view of the confluence of Rudolfsheim Fünfstadt, Mariahilf, Meidling and Margareten neighborhoods.





0 0 F

886,

surface

431,64m2

surface

790,50m2

m

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c

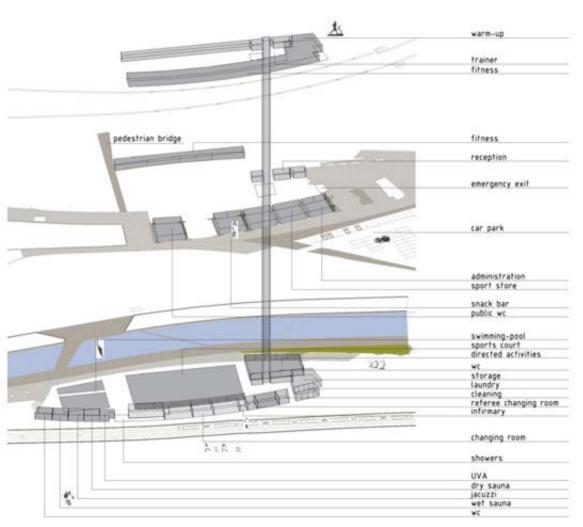
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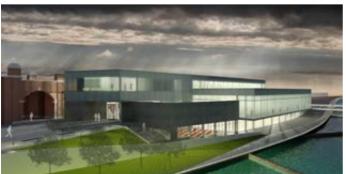
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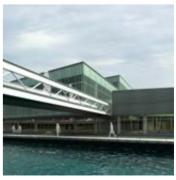
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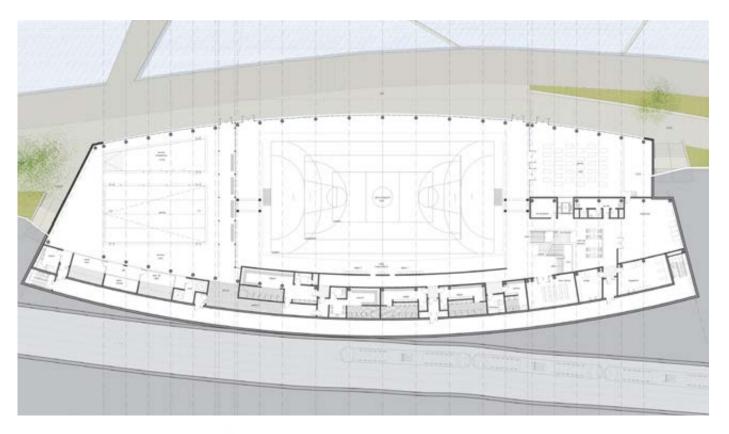
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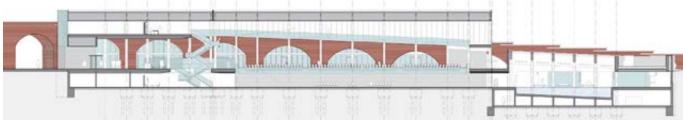






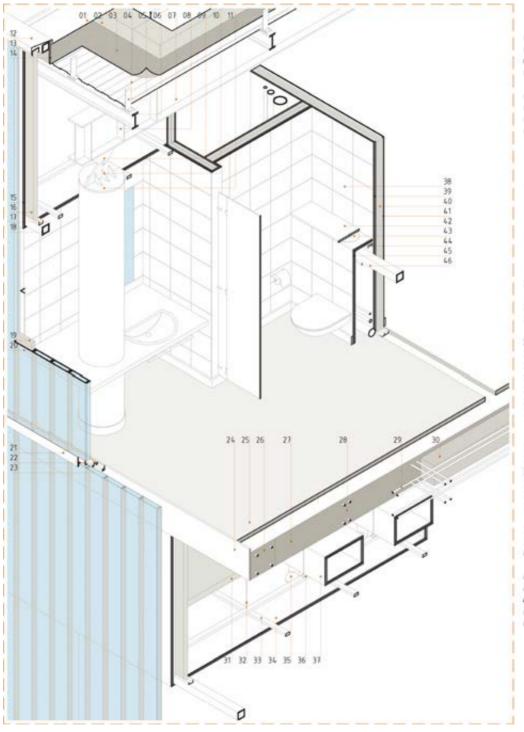






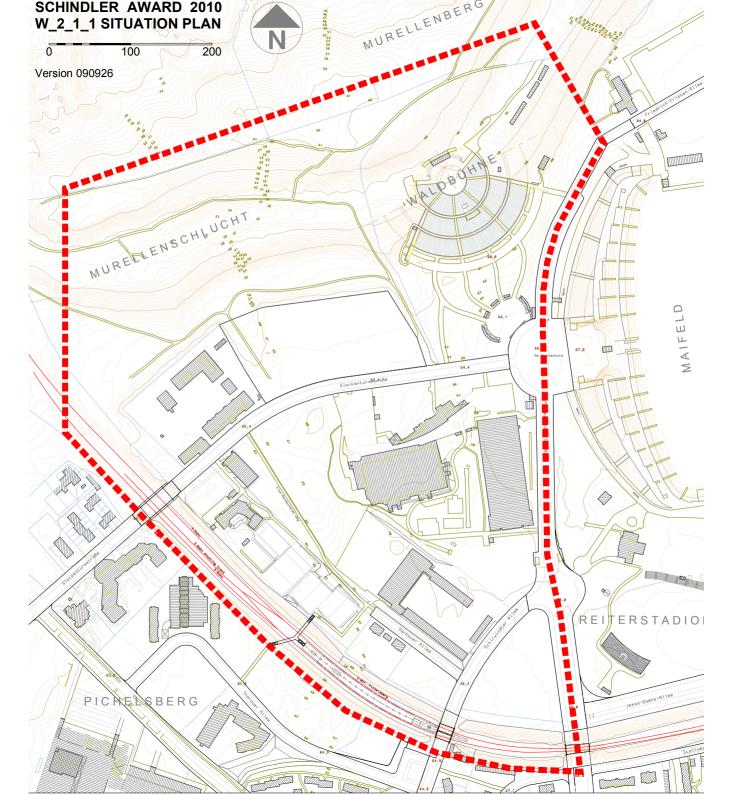






- 01 Aluminium shaped panel
- 02\_ Extruded polystyrene (e=180mm)
- 03 Foil vapour barrier
- 04 Aluminium shaped panel
- 05\_ Aluminium clip with thermal base
- 06\_ Small beam profile (IPE180)
- 07 Main beam profile (IPE500)
- 08\_ Steel plate stiffeners (e=20mm)
- 09\_ Articulation with steel pin
- 10\_ Steel reinforcement (e=20mm)
- Transition steel circular plate with pinning inside the concrete columns
- 12\_ Aluminium shaped panel with raindrop
- 13\_ Tubular galvanized steel shape
- 14\_ Aluminium shaped panel
- 15\_ Water-resistant plasterboard panel
- 16\_ Extruded polystyrene (e=80mm)
- 17\_ Galvanized steel C shape
- 18\_ Tubular galvanized steel shape
- 19\_ Special u-glass heat insulation
- 20\_ U-glass
- 21\_ 2 x Stainless steel profile (UPE100)
- 22\_ Thermally broken aluminium frame
- 23\_ Elastomeric joint
- 24\_ Perimetral stainless steel plate
- 25\_ Wax concrete continuous pavement
- 26\_ Perimetral band
- 27 Drop panel
- 28\_ Transverse corrugated steel nerve
- 29\_ Longitudinal corrugated steel nerve
- 30\_ Extruded polystyrene (e=350mm)
- 31\_ Rockwool (e=40mm)
- 32\_ Suspension rod
- 33\_ Tubular galvanized steel shape
- 34\_ Plasterboard panel
- 35 Lamp
- 36\_ Suspension system
- 37\_ Air conditioning pipe
- 38\_ White glazed ceramic tiling
- 39 Water-resistant plasterboard panel
- 40\_ Rockwool (e=80mm)
- 41 Plasterboard panel
- 42 Travertine marble slab
- 43\_ Tite adhesive
- 44 Galvanized steel C shape
- 45 Water-resistant plasterboard panel
- 46 Tubular galvanized steel shape

## Schindler Award 2010



# 2nd prize SCHINDLER AWARD 2010



Haydar Alward Mikael Pettersson LTH. Sweden

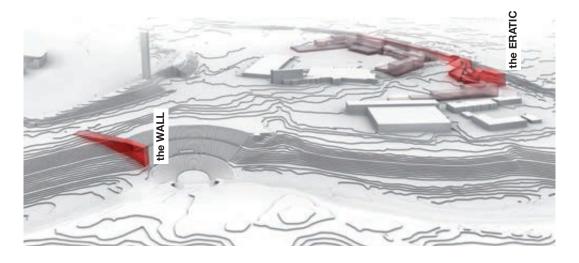
Prof. Abelardo Gonzalez Prof. John Cramer Prof. Morten Lund

# Made to measure

Our vision for the competition area is to create a fully accessible environment, where all people are able to enjoy ease of movement, and to just enjoy the qualities of the buildings, the street life and the surrounding nature.

All solutions to ease the movement and orientation within the site and in the buildings remain in the background and should together form a site which works well and is enjoyable to be in. The term 'access for all' can be used on a larger scale. Our site is accessible for all -by which we mean that many different people like to visit the site during different times and from different places.

The guidelines are a newly developed concept that we call 'follow me', 'Follow me' is a handrail that morphs along through the site and changes its shape and functionality, making different resting points along the site.



Removing and relocating old facilities

Adding a new hotel with public facilities



Framing a new path towards Waldbühne



New paths to strenghten urban-nature connections

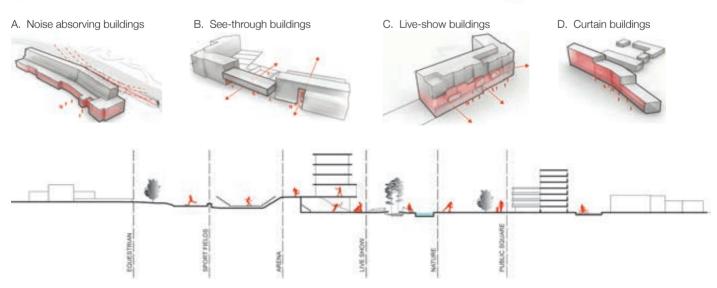




### STRATEGIC PLAN

The site is very well planned to handle orientation in the site. Connections and directions are very clear for everybody. Entering the site either by car or s-bahn, the point of departure will be the hotel and main square in front of it

The main square is a big, but well organized place. It has different of sequences that communicates with the different senses.

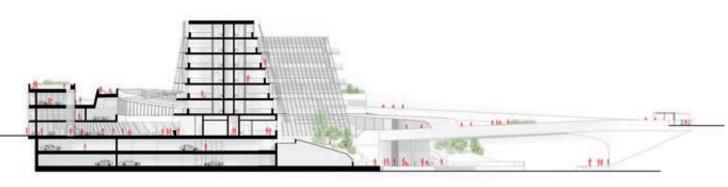


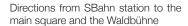


### THE ERRATIC

The Erratic forms the main entrance point in the area. The building complex will be the centrepiece of its surroundings. It becomes a dramatic part of the landscape and almost grows from the ground, while simultaneously serving as an 'arrival'.

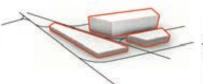








Program in-between the paths



Sunlight adapted shape.



New nature walk from the bridge to the roof top



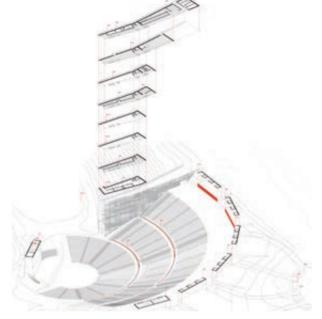
### THE WALL

Vertical connections to overcome height differences are the main focus of the Wall. The facility is sited to give access by means of six lifts at two different levels that sweep along the arena and allow access to seats at different heights of the arena. The Wall also works as a service building for the Waldbühne.



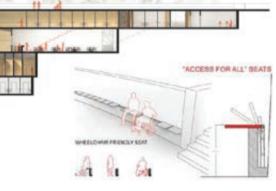




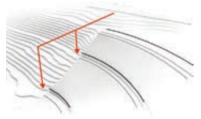




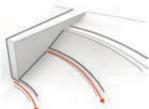




Overcome the vertical height difference



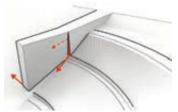
Access to different levels



Cranked to make entrance, frame view and not to disturb



Sited to not shade the Waldbühne and audience







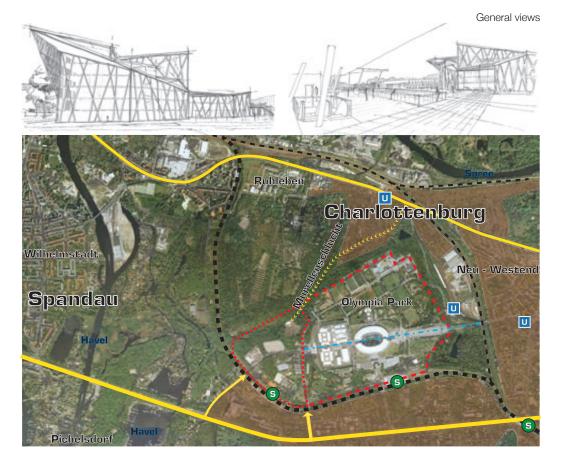
Filip Piwowarczyk Piotr Paluch PK, Poland

Prof. Jacek Gyurkovich Prof. Arch. Hanna Grabowska-Palecka

# Game of senses

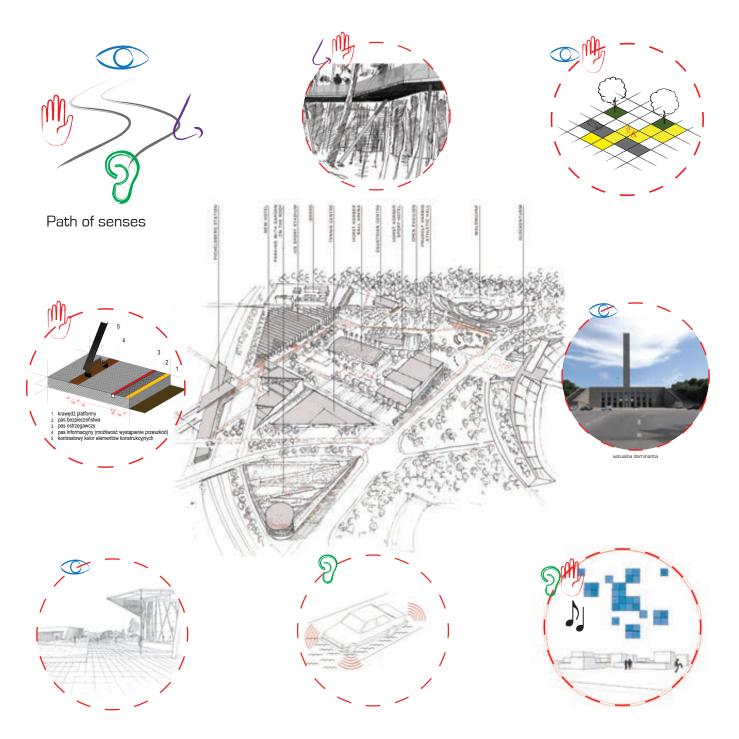
In our design we were searching for a composition that would create public spaces on a human scale and of diverse character. The volumes of the buildings, strong and clearly marked, were designated by basing them on two intersecting coordinate systems. It was aimed at reducing the number of directions that the user follows to four. The spaces created in between the buildings differ in character, scale and materials, which improves orientation.

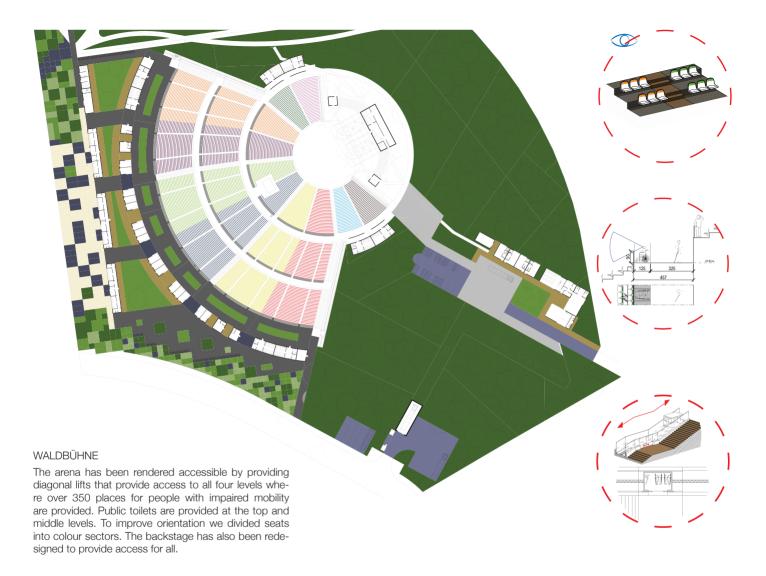
The fundamental element of the design is the 'path of senses' which leads users through the most important spaces and at the same time it stimulates all senses. The character of this space is provided by the various installations stimulating the senses, such as the musical fountain, sculptures of contemporary sportspeople and fragrant plants.

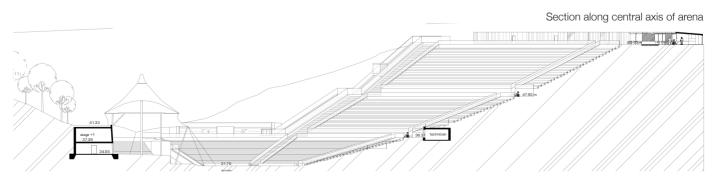


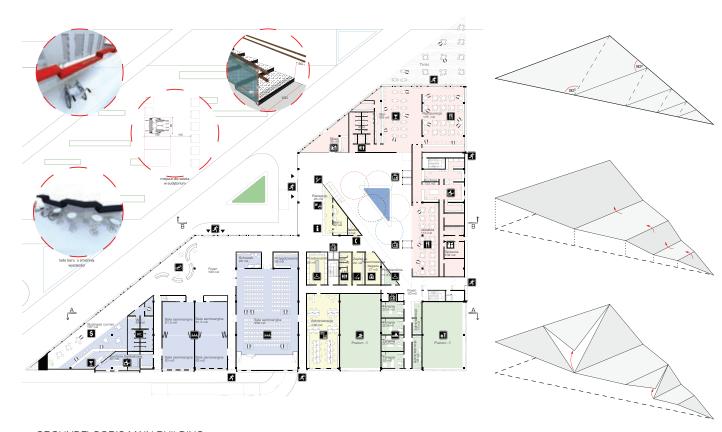






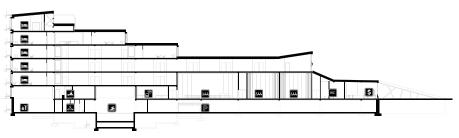




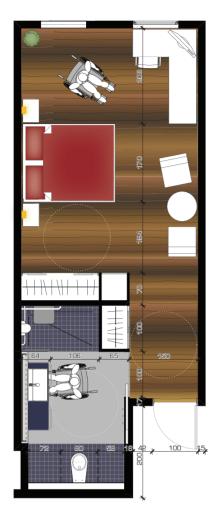


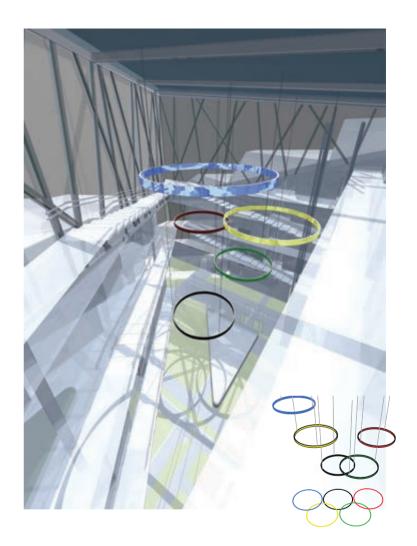
### GROUNDFLOOR'S MAIN BUILDING

The dynamic shape of the hotel indicates the direction which people arriving at the train station should go. This sculptural form is built on a modular orthogonal Grid of pillars 8mx10m. This construction allows the creation of clearly divided spaces inside. The spacious ground floor hosts most of the functions.











# 

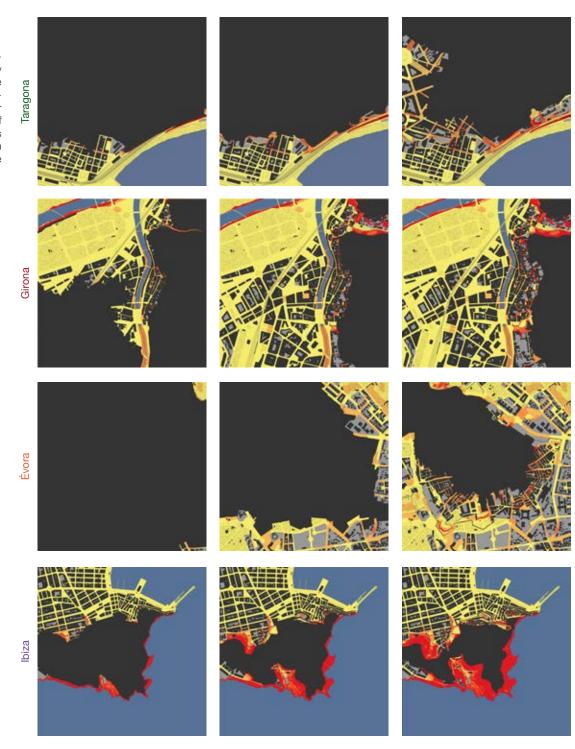
# MAIN STRATEGIES

All the cities studied by the LOCUS Programme are medium-size cities with similar topographic conditions and development growth, which translate into problems with mobility and the ease of connecting the old centre located atop the hill and the new city below. The general aspects of the LOCUS sites have steep topography, which makes mobility very difficult and slow. What's more, this topography is generally not modifiable, which severely reduces the number of possible solutions. Furthermore, LOCUS confronts the most unfavorable conditions: accessibility must be guaranteed for all, regardless of their different abilities; and at the same time the heritage of the city must be respected. As Francesc Aragall, President of the Design for All Foundation and special collaborator of the programme, says: 'trying to improve accessibility in "impossible places" will provide us with better knowledge on how to solve it in "possible places". Thus, by having to solve highly complex situations, participants brainstorm evocatively (not only the students and professors, but local authorities benefit as well). The aim is to exercise the design of innovative and feasible solutions, to conceive new proposals, all with an open mind.

Following the LOCUS experience, we are now able to outline the general procedures to be followed when studying the accessibility of protected historic cities. One of the first basic actions where people with special needs are concerned—also given the considerable increase of tourism of the elderly—is to facilitate a map indicating the accessible paths versus the non-accessible ones. Thus, according to this principle, the methodology consists of analysing the public urban space and mapping the streets according to their slopes in a gradient from yellow to red: starting with yellow where the terrain is considered flat (0-2%) and, therefore, fully accessible; then passing from light to dark orange in relation to the gradient of the slope (4-6-8%), considered as accessible with restrictions; and finally dark red (10-12% or more), where the slopes are hardly accessible or completely inaccessible. The slope-maps have been drawn up for each of the cities studied, making a further comparison possible in order to reach common conclusions.

### SLOPE-MAPS; CROSS-SECTIONS EVERY 10M:

Creating a sequence of slopemaps with cross-sections every 10m allows a quick reading of the site's topography, clearly identifying which areas reach the higher points in the narrowest width of terrain. That is, highly steep areas in need of vertical communication systems to guarantee inclusive access for everybody.

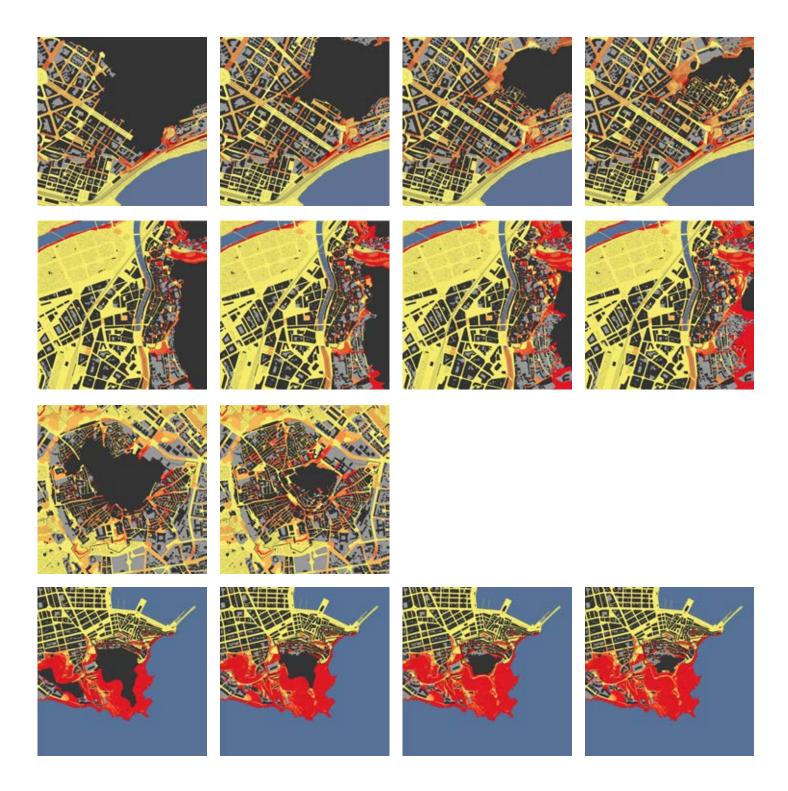








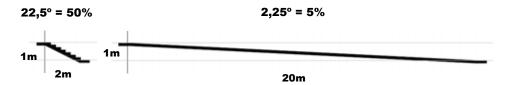




These slope-maps allow rapid detection of the main inaccessible points—what is commonly called 'dark points' by LOCUS participants and identified as dark red areas on the maps. These are locations where the primary urban interventions are essential. They are found in those areas where the slope is much higher than that allowed by regulations; thus, the most feasible solution is to integrate assisted transportation into the urban environment. For example, we must be aware of the significance of having to provide an accessible solution to a flight of stairs, as in the case of solving a 1m height difference; If the stairs occupied 2m on a floor plan (50% slope), we would need 20m on the floor plan if we modified it into an accessible ramp (5% slope). That means that the length of space on the floor plan becomes ten times more when transforming stairs into a ramp, i.e., when transforming from inaccessible to accessible. And 'ten times more' is a remarkably relevant increase in allotted space, as the following sketch highlights:

### 'TEN TIMES MORE'

Comparison of occupied space on floor plan: length of stairs vs. ramp when covering the same height gap.



It is obvious that such available space is rarely possible to find in a consolidated urban context and, consequently, for most situations the strategy is to implement two basic tools of action on an urban scale (in most cases, one must complement the other): 1) Mechanical vertical connections; 2) Innovative transport systems

### A. Urban scale; in relation to major interventions

1) Mechanical vertical connections 2





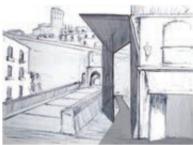
The aim is to identify those inaccessible areas that are impossible to be solved in any other way than by means of mechanical vertical connections. Lifts, mechanical ramps and funiculars are just a few examples. We have found two different conceptual approaches for introducing such devices: 1.1) City sewing: 1.2) New entrance

### 1.1) City sewing

The 'city sewing' concept consists of locating those particular points—empty plots or existing buildings—that are considered strategically situated, since they connect two or more streets at different levels. In such spaces it is highly convenient to install a lift for public use; thus a difference in level of about 5 to 20m, depending on the circumstances, will be compensated easily and without major problems. In terms of mobility, these kinds of interventions sew the city up, because they are repairing interruptions along the pedestrian paths and this, in turn, revitalises the commercial activity and facilitates greater consolidation of the area. Quoting the words of Brazilian architect and urban planner, Jaime Lerner [2011], installing a lift at a strategic point is tantamount to 'surban acupuncture' because 'it revitalizes a "sick" or "worn out" area and its surroundings through a simple touch at a key point. Just as in the medical approach, this intervention will trigger positive chain-reactions, helping to cure and enhance the whole system.'

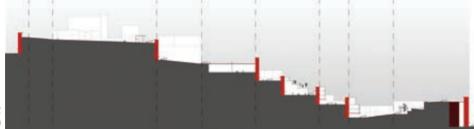
In relation to this 'city sewing' concept, it is worth a brief comment on the winning projects from the internal competition held at the LOCUS workshop in Ibiza, proposals that greatly developed this approach: Ibiza, similarly to the other cities studied by LOCUS, has its historic centre located atop a hill, surrounded by defensive walls, which makes mobility notably difficult because of the steep sloping streets and the arduous connections between the old and new part of the city. It is worth mentioning that the Ibiza historic centre is mainly uninhabited, most likely because of the difficulty in accessing the upper area. Hence many buildings are unoccupied. The first and second prizewinning projects (see images above) proposed a similar strategy of installing a system of interconnected lifts integrated into the existing unoccupied buildings. The first-prize project developed a brilliant dialogue with the built environment that it inherited: accessibility is introduced subtly, resembling the existing structures so that the facades are conserved while the lifts rise inside, like the ancient towers did. The aim here was to allow the new 'accessibility layer' to appear as a sign of modernity while ensuring conditions of mobility and orientation within the city.





CITY SEWING: Strategic installation of lifts for accessible paths.

lbiza - G3 (1st prize)



Ibiza - G2 (2<sup>nd</sup> prize)

As a matter of fact, many different working groups, when studying a particular city, concurred on the location where a lift or another system of mechanical transportation was needed to 'sew up' the urban environment. This coincidence pointed out, unequivocally, the need for such an intervention. Afterwards some of the students even decided to work in detail on these identified 'dark points' as their Master's Thesis Project. For instance, taking a closer look at the Tarragona case study: it is worth noting that it was one of the most important cities of the Roman Empire and the city's historical centre was built on the three great terraces of that period: the Roman Circus, the Provincial Forum and the Temple Complex [Macias, 2007]. Even today, the structure of these terraces can be clearly seen in Tarragona. Each of them is generally flat, though obvious difficulties still exist in moving from one to the other. Each terrace is several meters higher than the other, respectively, and connected by extremely steep streets or steps. Therefore, it is not difficult to move around because it is flat; the main problem is moving between them.

In such a clearly structured urban environment, it is not surprising that almost all LOCUS-Tarragona workgroups detected the same 'dark point' to solve, which is located between the levels of the ancient Roman Circus and Provincial Forum, on the street named Baixada de la Misericòrdia (it is worth noting its English meaning: The Descent of Mercy!). This street's slope is above 20%; the road is paved with pebble stones while the sidewalks have stairs on both sides. Analysis of the site confirmed the impossibility of adjusting it to the maximum allowable slope permitted by regulations. Thus the most repeated solution was to install a lift, taking advantage of the structure of an existing building strategically located on Baixada de la Misericòrida. Hence, this case study definitively highlights the dark point where a mechanical vertical connection is needed, as the reader might see if comparing the different students' proposals.

### LOCATION OF 'DARK POINTS' -COINCIDED PROPOSALS:

Several LOCUS-Tarragona proposals for installing a lift in Baixada de la Misericòrdia St.



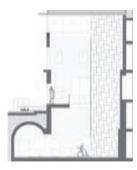




(from left to right): G6, G5, G3.

Additionally, two LOCUS-Tarragona students from UPC, Carlos Vidal and Laura Padrós, decided separately to work more in depth on the Baixada de la Misericòrdia 'dark point' for their Master's Thesis Project. On the one hand, Vidal approached the project from a more urban planning perspective, developing a detailed project consisting of repaving the entire main axis of circulation to provide a barrier-free surface, smoothing slopes when necessary, and installing a lift in the mentioned existing building strategically located on Baixada de la Misericòrdia. On the other hand, Padrós opted for demolishing the derelict buildings of the site, in order to construct a new social facility for the neighbourhood: a care centre for the elderly, much needed because of the ageing population in the historic centre. The building site was long enough to include a public lift at one end - in the exact same position as Vidal's proposal - and a public park with soft ramps at the other end for greater ease of access. (For further details see the Master's Thesis Project section).

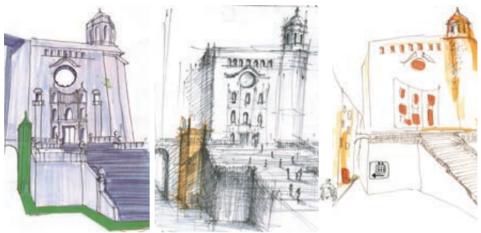
Two Master's Thesis Projects that solve the 'dark point' located in Baixada de la Misericòrdia St.





(from left to right): C.Vidal, L. Padrós

However, the reality is that most cities are not as topographically terraced as Tarragona. In the case study of Girona, for instance, the city is extremely topographically complex: there are numerous steep streets, some of them converted into sets of steps, which makes mobility highly complicated for visitors and inhabitants. Looking closely at the slope-map, it is possible to locate several red areas, but not one clear 'dark point', as in the case of Baixada de la Misericòrdia in Tarragona. Nevertheless, many LOCUS-Girona working groups also coincided on one location where 'mechanical vertical connection' is needed. The most repeated proposal was to install a lift next to the steps leading to the Cathedral, as shown in the next images:



LOCATION OF 'DARK POINTS' - COINCIDED PROPOSALS:

Different LOCUS-Girona drawings suggesting a similar location to install a lift for easy access to the Cathedral.

(from left to right): G4, G3, G2.

To provide more examples of 'city sewing', where selecting the right 'acupoint' can improve urban mobility by reusing an existing building or by occupying an empty spot, it is worth briefly introducing Carles Tuca's Master's Thesis Project. He is a UPC student who also participated in LOCUS-Girona, and Tuca focused on an eighteen-century mansion enclosed between two streets with a 10m difference in height. His proposal was to restore the mansion and open it to the general public as a civic centre, offering new functionality to the area and designing new green spaces for leisure, while linking them all with the assistance of mechanical connections. (For further details see the Master's Thesis Project section).



Master's Thesis Project reusing a building as an 'urban acupuncture' point, to improve mobility and create a new centrality.

### 1.2) New entrance

In contraposition to the 'city sewing' strategy, some other students worked on the hypothesis of creating a 'new entrance' point to the city, instead of improving access through the narrow historic paths. The aim was to locate a strategic entrance point in order to reach the highest level quickly and easily, and then facilitate downhill routes, which are notably easier for everybody. It is important to highlight a common situation detected while analysing the cities studied by LOCUS: inhabitants - especially tourists, who are often elderly visitors—usually get tired when wandering around the old city, mainly because of the high slopes and steep steps along the way. For instance, the Cathedral, which is an indispensable site for most visitors, is usually located at the highest point of the city and it is common to see tourists arduously climbing up to it, and then having to walk all the way back down again. Hence, the objective is to bring people directly to the upper part by means of mechanical connections, such as a funicular or a panoramic lift. This kind of intervention provides the opportunity of generating a new urban centrality, often becoming a touristic attraction that offers new activities supported by leisure services, green areas to rest, etc., as the following drawings illustrate:

### 'NEW ENTRANCE':

Installation of an inclined lift in the South part of the Ibiza walls, creating a new direct access to upper Dalt Vila. This intervention regenerates the area, along with the design of a green park equipped with underground parking and public transportation stops.

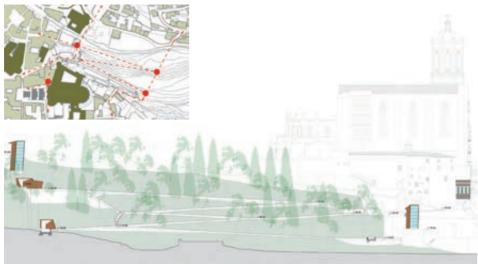




Ibiza - G8

According to this 'new entrance' exposition, it is worth briefly talking about two projects developed by Sergio García and Eva Pérez, UPC students who participated in the LO-CUS-Girona and LOCUS-Évora workshops, respectively, and afterwards worked in detail on the site as their Master's Thesis Project:

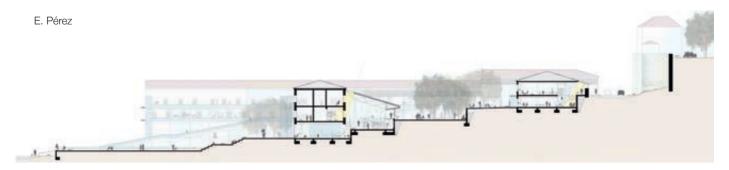
In the case of Girona, García's analysis of the city detected an irregular growth towards a steep area located in the north part, beside the Cathedral, which has always been disused and appears as an abrupt end in the city's growth. This particular character of the area led García to the certainty of having detected the 'dark point' where 'mechanical vertical connections' are required. The project is a global intervention in the public space and consists of connecting, by means of accessible itineraries, four new strategically located lifts: starting from the upper part, the first lift is located next to the Cathedral and provides access to it; the second one is installed in a public garden a little above; and the third and fourth lifts are installed in the forest area nearby, allowing an accessible green path in the woods that finally reaches the modern part of the city at the lower levels. This proposal takes the opportunity to reclaim a residual area and confer significant continuity to Girona urban planning. (For further details see the Master's Thesis Project section).



Two Master's Thesis Projects creating a new entrance to the upper part of the city; recovering a residual area and becoming a new node of centrality, respectively.

S. García

In the case of Evora, firstly it is important to note that, compared to the size of the other three cities studied by LOCUS, Évora presents a much larger historic city centre and, because of that, it was decided to divide it into 9 similar areas, one for each working group of students, Pérez decided to develop her Master's Thesis Project on sector number 9 (although it was not actually her sector of study during the LOCUS workshop), because it was identified as one of the most interesting sites due to its strategic position in the steepest area of the city, where the greatest height-difference occurs in the minimum grounddistance. Sector 9 corresponds to the University of Évora, which is located between the Medieval wall, at its highest point, and the external circumvallation, thus facilitating exterior arrival and direct connection to the historic centre. Consequently, it is considered one of the best sites for quickly reaching the highest point of the city, where the Diana Temple stands, one of the most visited touristic attractions of the city. Pérez's project consists of using lifts and mechanical ramps to combine the interior university path (whose current sloping is around 20% and hardly practicable) with newly created public spaces and services, such as a library or a cafeteria. This new mechanical path is understood as an urban public space, which can be used by inhabitants and visitors 24/7, no matter if the facilities around are closed. The accessible itinerary ends at the upper street with a lift hidden in the Medieval wall and which ultimately connects to the Diana Temple. (For further details see the Master's Thesis Project section).



To conclude, this 'new entrance' strategy, solved mostly by means of mechanical vertical connections—such as lifts, inclined lifts, funiculars, mechanical ramps, etc.—has the potential of bringing fresh activity to the city and creating a new node of centrality with renewed functionality and services offered to the public. For it to be a major success, it should be simultaneously complemented with public transport stops and parking areas in its immediate surroundings, in order to establish permanent mobility connections between all entrances and ending points of the city's primary routes. This leads us to the second main strategy of improving accessibility through an urban scale approach:

# 2) Innovative transport systems 🗐 🗒





The reality is that historical cities present steep topography and are mostly nonmodifiable, where it is not always possible to guarantee autonomous mobility for all users. For this reason, public transportation becomes an essential tool in counteracting the lack of accessibility. The aim is to locate the main entrances to the city, points with higher demand on transport, and to identify the main touristic routes of important cultural and historic value in order to study the conditions of mobility. This is fundamental for understanding inclusive urbanism. By planning an efficient network of public transport with the principles of sustainability and design for all in mind, the goal of LOCUS to open cities for us can be achieved. Nevertheless, not all standard transport systems can be used in some streets and urban environments, especially the ancient and irregular paths present in historic sites. Through their research in this vein, LOCUS students have proposed designing innovative, smart transport systems which are capable of circulating around narrow streets and carrying people with additional technical aids such as wheelchairs, prams or trollevs.

To illustrate this approach, it is worthwhile to introduce the project that won the second prize in LOCUS-Girona. Its main concept is to promote green spaces and public transport by creating and combining two beltways of transportation: 1) the 'Green Belt', an external circulation where electric buses run along the outer limits of the city; and 2) the 'Accessible Belt', an inner transportation network consisting of electric cars that circulate among the emblematic points of the city. Both belts are connected at every station, thanks to a GPS bracelet that passengers wear so that they can locate the nearest electric car available and reserve it. The GPS system is also an aid for helping to navigate the city and not lose one's bearings.









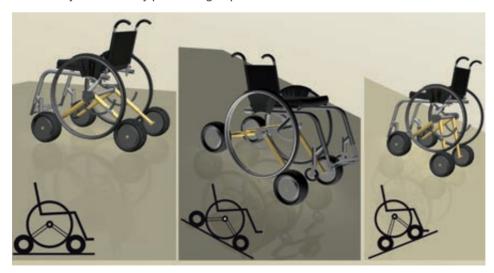
Girona - G4 (2<sup>nd</sup> prize)

A similar approach to resolving the accessibility of a city by means of public transportation was followed by a students working group in LOCUS-lbiza: Their main concept accurately designed the minimum cabin for a tram and its stop area, dealing with the great difficulty of finding a proper itinerary able to fit such a vehicle within the narrow streets of lbiza's historic centre, known as Dalt Vila. Because of the urban complexity of Dalt Vila and the rigidity of a tram system, it was only possible to reach some emblematic destinations and not the whole area.



Ibiza - G6

Finally, as an alternative to the above proposals, it is worth mentioning the design of a new wheelchair proposed by one working group in LOCUS-Évora. This group of students argued that public transport is too rigid and often restricted to a fixed route where changes in the itinerary are not possible. Questions such as, 'What if the public transport doesn't reach my desired destination?' led them to design an improved wheelchair 'capable of everything': able to climb stairs, to avoid flipping over when climbing steep streets, even to correct the degree of the seat inclination and/or the user's elevation for his/her maximum comfort. This solution, although admittedly research is needed for improving wheelchair designs in general, is not a 'solution for all' in terms of a city's accessibility, since it only serves a very particular group of users.



Évora - G6

### B. Street scale; in relation to details and maintenance issues:

At the same time, all these urban strategies must be complemented by a closer scale approach, paying attention to the specific street design: types of paving, transversal slope, urban furniture, etc. It is fundamental that the pavement is suitable and is constantly maintained, because loose, broken, or uneven cobblestones and the like are what cause most falls by pedestrians. Such accidents very often result in serious injuries to elderly people. Pavement is accessible only if it is a flat, hard and non-slippery surface.

LOCUS attempts to reduce traffic density in historical areas by giving priority to pedestrian circulation. However, vehicles must be allowed to enter the area occasionally for supply, maintenance, security or emergencies; so strategies will be needed to guarantee the security of all citizens, especially the visually impaired. Different textured pavements or selectively located and suitable urban furniture are but two examples. It is important to limit vehicle circulation to ensure pedestrian safety and that the sidewalks and the road are wide enough for both pedestrian and vehicles. Normally, sidewalks are elevated from the road, which hinders access between both sidewalks. It is also important to notice that street width in historic areas is often irregular; in certain circumstances the sidewalks become narrower and narrower, even to the point of almost disappearing. This is brilliantly illustrated in the drawings below:

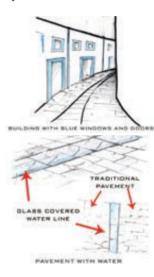


Évora - G2

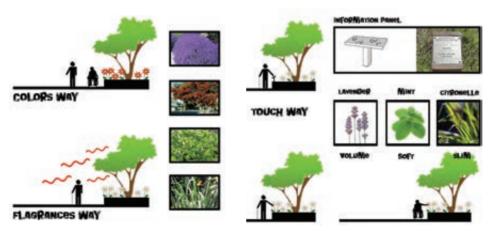
In areas where the streets are 7m wide or less, one proposal is to elevate the road to the same height as the sidewalk; in doing so, pedestrians may circulate comfortably while at the same time vehicles may feel dissuaded from invading a 'forbidden' area where they have to reduce speed and drive more carefully. This solution, however, makes it more difficult to ensure citizen safety because of traffic and pedestrians circulating at the same level. This would especially be the case for visually impaired people, who are used to having a step for knowing whether they are on the sidewalk or the road. It is advisable to distinguish the 'safe space' for pedestrians from the 'shared space' with vehicles by combining different textured pavements and/or urban furniture, both of which can be easily detected by hand touch or by cane. Regarding research on guide-lines for helping visually impaired people navigate, various worthy proposals were made by students, such as: installing lights into the pavement for guidance, especially at night time; streams of water for easily identifying accessible paths; or flowers and other aromatic plants with vivid colours and easily recognizable smells to indicate the way.







Ibiza, (from left to right): G4, G5, G1



Évora - G8 (2nd prize)

The aim here is to engage other senses, such as through fragrances or the sound of water, rather than relying only on the sense of sight, as Juhani Pallasmaa [1996] brilliantly explains in his book The Eyes of the Skin. This idea promotes an 'architecture of the senses'. Water becomes an element of design that exists not only as a guidance element for aesthetic and/or environmental purposes, but also for the body's pleasure. If a running stream of water is situated along the top of the wall next to the stairs, for instance, the hand can touch it without having to bend down, thus refreshing the body with the feeling and sound of fresh water, which is especially pleasant on hot summer days. As the environmentalist experts Franck and Lepori [2000] maintain, all the human senses must be taken into account in every design process, because the generated form and spaces in architectural design directly affect all our senses, not only sight, but also touch, sound and smell.

This process of designing architecture from one's own perception, that is, experiencing architecture rather than just drawing it, was that followed by the winning project of LOCUS-Évora: Firstly, it is important to note that Évora is an inland Portuguese town with plenty of tourists and very high temperatures, especially on summer days. This working group noticed how the streets become silently empty at noon when all the local people hide in their homes to avoid the unforgiving sun, whilst the tourists, many of them elderly, remained on the streets searching for some shade to survive. Thus, the winning project of LOCUS-Évora distinguished itself as a relevant example in globally improving a city's well-being by redesigning the urban space and combining four different tools: green areas, pergolas, water, and green facades. The result is a 'city for all', which not only ensures accessible paths, but also enables enjoyment and peaceful rest in green spaces with water points and shaded areas along the routes. This appeals especially to the elderly, children and pregnant women while at the same time green facades cheer up the city and its citizens.

Évora - G5 (1st prize)



















# DISCUSSION

A young architect was wandering and taking pictures, admiring the charm of a small village hidden in the mountains of Extremadura (Spain), when he suddenly noticed the presence of an old woman dressed in black. Her head was also covered with a black scarf, as was the tradition back then, and she was staring at him. She seemed upset, so the young architect, in an attempt to pacify the situation, said cheerfully, 'What a beautiful place!' To which she immediately replied, 'Yes, but only the sight of it!'. She went on to explain why she was unhappy: Some heritage authorities would not give her permission to redesign her kitchen and adapt it to the new electrical appliances.

This story happened 30 years ago, but its significant message remains relevant nowadays: For this elderly lady, it was clearly better to live in a place that is not so beautiful but better conditioned for modern life. And that clearly evokes the eternal dilemma between beauty and use that we must face when talking about architecture for all and heritage. The question arises: Was the old woman trapped and forced to live in a sort of decorated cardboard?

LOCUS IP encourages a general reflection upon the need to renovate our emblematic historic cities and their architecture, in order to return them to their citizens and users. As time goes by, societies prosper and needs change; architecture cannot do anything but move forward with it all. The same occurs in historic cities: most of them originally chose strategic settlements, on top of a hill with difficult access, with the intention of defending against enemies. But defensive walls and controlled entries are no longer necessary; in fact, they contradict completely the desire of all contemporary cities to allow growth and external relationships. We must study our cities in order to allow all the necessary transformations that ensure all users can continue living in their homes, especially the significantly growing elderly population.

A certain sort of 'museumization' is detected in patrimonial cities, where the desire to preserve the heritage at all costs seems to prevail upon people's rights of free mobility and enjoyment. Daily urban life is minimized because the environment is transformed into pure images only to be admired from a distance, in a kind of simile of frozen heritage as a great sculpture. Indeed, architecture occupies a vague status, halfway between pure art and utilitarian concerns, a dualism that causes great debates that impede decisions on conserving heritage. If we understand the origin of architecture as the purpose to provide shelter for human life to prosper, or if we agree with William Morris' understanding of architecture as the moulding and altering of the environment to meet human needs [Kelvin, 1999], many questions arise: When did inhabitants stop transforming their environment to adapt it to their own necessities and their own enjoyment? At what point did architecture begin to be considered heritage, converted in the end to artwork which must only be protected and admired but never used? And, if this is the case, are we then looking at architecture or sculpture? Is architecture, therefore, pure art?

The concept of heritage emerged in the late 18th century, when the first law for the preservation of heritage was passed in 1790 during the French Revolution. Prior to that date, the notion of heritage conservation did not exist: everything used was kept, naturally, or it was appropriately modified to better suit changing needs. Meanwhile, everything that was unused or that had fallen into oblivion was simply discarded [Garcia-Fuentes, 2010]. Indeed, the nature of any inhabited environment (excessively called 'heritage' nowadays) is that it is in a constant state of change, like a house is naturally transformed after newborns arrive and others leave or pass away. Architecture must maintain its inherent process of transformation over time, to respond to its original purpose of serving society and its current needs. As Rasmussen [1959] pointed out, it is important to be consider:

'That which may be quite right and natural in one cultural environment can easily be wrong in another; what is fitting and proper in one generation becomes ridiculous in the next when people have acquired new tastes and habits. (...) In the same way, it is impossible to take over the beautiful architecture of a past era; it becomes false and pretentious when people can no longer live up to it.'

This way of thinking should guide us on how to approach the matter of heritage, because historic preservations will be used only if they are rectified and made accessible, thus ensuring that a place's history and identity will be passed down through generations. Citizens need to re-conquer heritage and encourage the natural process of adapting to the demands of contemporary users, thereby integrating it into present social life. Nowadays, indeed, we are experiencing some kind of 'discontinuity in our culture; the past is preserved but not made part of the future (...) architecture, like literature and landscape, is part of our collective memory, which we must incorporate into our present experience' [MacCormac, 1996]. In order to do this, we must accept that some changes are inevitable, that alterations are natural and should be a welcome requirement for prosperity and survival. Altering, changing, transforming: these actions naturally entail some kind of loss, a process of releasing, of forgetting. The French ethnologist Marc Augé [2004] explains how forgetting propels us into the present, how 'to live again and not just survive', in an illuminating comparison with gardening: 'Remembering or forgetting is doing gardener's work, selecting, pruning. Memories are like plants: there are those that need to be quickly eliminated in order to help the others burgeon, transform, flower.'

Many architects and thinkers have approached this question of transformation, notably the Portuguese architect Alvaro Siza, who is a sculptor as well. By reflecting on the condition of architectonic form, Siza [2008] conceives form in architecture as an endless process, something always open to transformation, and he asserts, as well, that it should not be a sculpture for demonstrating the architect's talent. Hence, architecture—including patrimonial architecture—cannot be treated as a closed art, such as painting or sculpture, where the masterpieces have a clear beginning and end in the creation process.

Indeed, we will achieve a higher quality of life and feeling that life is good in our cities and buildings only when we get rid of certain excessively conservationist attitudes and allow the transformation of our built environment to suit our current needs. Thus it has always been and thus it will always be. We need only to take a look at how our old buildings were once lit by candles and/or oil lamps and consider they are now lit by electrical installations. Or how, at one time, residents had no other choice than to do their business outdoors while thankfully all buildings now have indoor plumbing and sanitary facilities. Without regret, we have accepted the existence of modern, non-aesthetic elements like fire extinguishers in historical dwellings for reasons of safety. Why, then, does public opinion bemoan the installation of a lift or a suitable ramp in certain patrimonial environments?

Maybe it is due to purely selfish or naïve reasons; people accept without controversy the existence of new (and compulsory) elements, such as fire extinguishers in protected heritage environments, because everyone has equal benefit from safety measures in the event of fire. Instead, when talking about solving architectural barriers by installing a lift, for instance, 'apparently' only a few profit from it. 'Apparently', because there is a common tendency to deny disability, the inevitable reality of aging, the progressive decrease of our abilities. Our subconscious mind is always thinking: 'This has nothing to do with me', or 'It will never happen to me'. The intention here is not to enter into a thoughtful philosophical reflection or a statistical study which proves that everyone, at one time or another, will encounter mobility or sensorial impairments, that they will one day lose their bearings or not be able to access a certain desired activity. What is very important to remember is that eventually we all, in one way or another, will be equally satisfied by a barrier-free environment.

For the same reasons, the suitability of some existing pavements needs to be questioned and the possibility of replacing them evaluated. In different historic city centres, for instance, we find surfaces paved with pebble stones. The reason for that most certainly goes back to when the horse was a regular means of transport and pebble stones prevented the animal from slipping. This solution made perfect sense then, but does it now? Pebble stones cause people to fall down when the surface is wet, high heeled shoes break easily, the front wheels of a wheelchair get stuck, sleeping babies in push-chairs start crying, blind people feel insecure and lose balance, and so on.

The most repeated proposal given by LOCUS students, most probably after the experience of the disability simulation, was to replace the uneven cobblestones or pebble stones with new accessible flagstones. Discussion of replacing this pavement sparked a debate on the possible loss of heritage, and for this reason some working groups decided to repave just the minimum area needed for easy and accessible circulation. In contrast to this proposal of repaving only a part of the street to ensure an accessible path within it, LOCUS wants to highlight the original solution proposed by some students, which con-

sists of: repaving the main surface of the street with new accessible flagstones or similar (flat, hard and non-slippery) and, instead, leaving a narrow line of the original historic pavement as a reminiscent trace. In this way, the preservation of heritage is achieved, with the simultaneous added value of serving as a guide-line for the visually impaired.

## CONTRAPOSITION OF PAVING REPLACEMENT PROPOSALS:

(above) Repaying the minimum area necessary for accessible circulation.

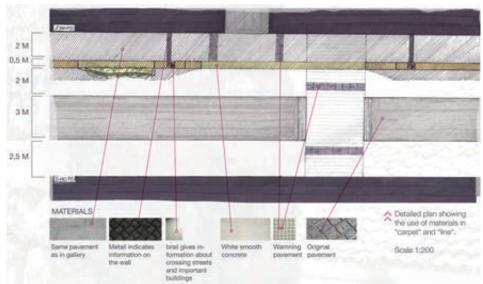
(below) Repaving the entire street, except for a strip of the original historic pavement which functions as a historical trace and as a guide-line for the visually impaired.







(from left to right): Évora - G6, Girona - G4, Girona - G5.



Évora - G7 (3<sup>rd</sup> prize)

# CONCLUSIONS

It is essential to understand that it is an inhospitable environment that makes a person feel handicapped: an inaccessible environment generates despair and impotence in a person with special needs, who feels helpless in such a place. What is more, it provokes erroneous social awareness about the capacities of certain people, a fact that regrettably ends in prejudices and discrimination. The target must be to promote equally accessible environments, so that those with different abilities won't be treated as 'not normal', as different from the rest and restricted to segregated areas or special accesses and alternative itineraries for reaching their destinations. We must find unique and unitary solutions for everybody equally, and we must be aware that by truly suppressing architectonic barriers we will eliminate many negative effects of disabilities.

Suppressing architectural barriers must therefore be the means and purpose for transforming heritage. Accessibility is the new contemporary layer that coexists in harmony with earlier ones. It cannot be overstated: We have allowed new elements to be introduced into our buildings, indispensable elements for carrying out our contemporary daily activities. Electrical installations, sanitary facilities and safety devices, all of them appeared without polemic. We have similarly allowed our cities to be transformed by new elements that did not exist in the past, such as electric cables and streetlights, traffic signs or recycling containers. These transformations have also been accepted as normal, without controversy. Why, then, do we seem reluctant to accept mechanical ramps, lifts or any other technological device for facilitating vertical connections in certain environments? Why should we not embrace new technology equally for improving urban connections?

# HERITAGE INTERVENTIONS: Accessibility

The aim is to attain 'unnoticed accessibility' through integrated universal proposals and not by specific solutions for the handicapped. The British Professor of Architecture, David Bonnett [2009], defines good accessibility as 'not being evident, because it is not obvious'. Or, in the words of the Spanish accessibility consultant Enrique Rovira-Beleta [2001], 'good accessibility is that which exists but goes unnoticed by users'. It could be described in a very simple way: if we are able to take a picture of an accessibility solution, it means that it is obvious and not integrated, therefore the problem has not been correctly solved. An accessible design should be the whole space and not specific areas or orthopaedic devices aimed at facilitating access to a specific group of users. Besides, architecture which can be used by people with mobility and/or communication impairments will always be more comfortable for everybody; it is not about solutions for a few, but benefits and quality of life for all. An accessible architecture is highly and widely beneficial because designs that are equally usable by all are also more sustainable and efficient constructions, which translates to a notable increase in quality. Those designs that make sense for all users always work better and generate more profit, since the maximum number of people can use them. The reality is that accessibility requirements must be seen as business goals and opportunities, never as negative obstacles.

People naturally gravitate toward an easy life, simplifying efforts and choosing what does not require excessive and repetitive actions. In this sense, when providing strategically located lifts in steep environments, it is not fair to say that they are meant only for the handicapped, because the truth is that everyone takes advantage of them. The solution of installing lifts in existing buildings or empty spots strategically located in historic city centres (the 'city sewing' concept described by LOCUS) appears to be one of the best answers for improving urban mobility connections while maximally respecting the integrity of the city's heritage. This procedure is reproduced in similar ways in several situations, such as the remarkable intervention in the city of Ripoll (Spain), which won the award Premio Imserso Infanta Cristina 2008. There, a rehabilitation project took advantage of an empty plot to construct a lift-building to improve the connection between the historic centre and the Sant Pere district, in the lower area. The intervention was built in a vivid red colour, making it easily recognizable from long distances, and was qualified as 'an element for the integration and circulation of all the citizens, providing easy access to everybody, especially the mobility impaired.'



CITY SEWING: Lift in Ripoll (Spain) - Premio Imserso Infanta Cristina 2008

# as the new contemporary layer

In contrast, on other occasions the lift is conceived from the very beginning as an architectural masterpiece in itself. These are situations where magnificent lifts become touristic attractions that offer panoramic views, such as the Santa Justa lift in Lisbon (Portugal), the Begoña lift in Bilbao (Spain), or the Lacerda lift in Salvador da Bahia (Brazil), just to provide some random examples.







CITY SEWING: (from left to right): Santa Justa lift (Lisbon, Portugal) Begoña lift (Bilbao, Spain) Lacerda lift (Salvador da Bahia, Brazil)

Finally, another worthy example is the project of Castelgrande in Bellizona (Switzerland), a fortified medieval structure in the Alps which was declared a World Heritage Site by UNESCO in 2000. The final comprehensive and respectful restoration was carried out by the architect Aurelio Galfetti in 1982-1992:

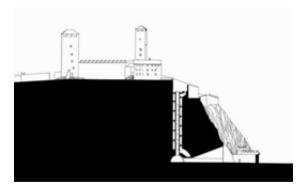
Traces of the various periods of history can be detected in the castle enclosure: an initial construction dating from the 13th century, a later Milanese phase from the 15th century, a first restoration from the 16th century, major interventions from the 18th century and, finally, the last restoration made by Galfetti in the 20th century. The view from the castle is imposing: its privileged location on top of the hill allows a view of the city layout, admiring how it extends through the valley. Prior to Galfetti's intervention, the castle could only be accessed from a direct but tiring steep path, or through a road with a more comfortable sloping but much longer distance. The castle, indeed, looks like a painted background in the horizon that can be easily seen but that was rarely visited and enjoyed by the residents, due to its complicated and discouraging access. The brilliance of Galfetti's work consisted, among other things, of installing a lift at the base of the mountain, leading directly to the interior of the enclosure on the top of the hill, as shown in the image below. This unique and seemingly insignificant action had a remarkable impact on the relationship between the old castle and the town, increasing the value of the spatial perception and defining a new functionality: that of 'a public park at the territorial scale'.

This type of intervention creates access to heritage, without being a limited and temporary answer. Instead, it generates large scale understanding and a willingness to integrate adjacent but unconnected urban areas. It also exemplifies the philosophy and essence of the programme LOCUS - Let's Open Cities for Us: to preserve the past so that it can

effectively become part of the present, keeping the natural process of transforming the built environment. Or, as Galfetti [online] describes the Castelgrande restoration, under the motto 'conservation = transformation':

'In the relationship between ancient and contemporary, in the inevitable conflicts that can really make possible this direct confrontation between past and present without subordinating the latter to presumed greater values from the past. I have dedicated much energy. (...) This relation between old and new has often been faced without the difficulties that we currently encounter, conferring on the built environment that particular beauty that derives from the stratification of different periods. With the restoration, I obviously did not want to interrupt this process, but to continue it in contemporaneous times.' (Quotation translated by the author)





Castelarande restoration. by Aurelio Galfetti (1982-1992); Bellizona, Switzerland

To conclude by reasserting that heritage will only be sustainable when we facilitate its use, the author of this book strongly maintains that the process of transformation is a safe path towards sustainable preservation; the only fully preserved architecture is that which is still used, useful, and which respects the original will of all construction, that is, to serve for what it has been created. Hence, the conservation of heritage means ensuring the right to use it, offering equal open access for everybody. Accessibility must appear as the new contemporary layer coexisting in harmony with earlier ones, and the duty of the architect is to establish this dialogue between ancient and contemporary in the most natural, aesthetic and integrated way:

'In fact the presence of great architectural monuments of the past among the buildings erected by the modern world of commerce poses the task of integrating past and present. Works of architecture do not stand motionless on the shore of the stream of history, but are borne along by it. Even if historically-minded ages try to reconstruct the architecture of an earlier age, they cannot turn back the wheel of history, but must mediate in a new and better way between the past and the present. Even the restorer or the preserver of ancient monuments remains an artist of his time.' [Gadamer, 1989]

### New elements:

electric cables, garbage containers, cash dispensers, traffic signs....





# Accessibility = new contemporary layer:

lifts, mechanical ramps, escalators....





NEW ELEMENTS: (from top to bottom): Garbage containers in Granada Cash dispenser in Salamanca

NEW CONTEMPORARY LAYER: (from top to bottom): Lift in Ripoll

Lift in Museo Reina Sofia, Madrid

(All Spanish cities)

# TEACHING ACCESSIBILITY: multi-sensorial

LOCUS IP is formulated as a set of workshops counting on the participation of 9 European Schools of Architecture, which provide 4-6 students and 1-2 professors each during 15 intensive days per workshop with the aim of carrying out specialized studies on inclusive urbanism. The opportunity of having several European Universities working on the same topic promotes learning and understanding of specific problems from different points of view. The exchange of knowledge and experiences increases, together with a greater diffusion and debate of the results generated. In addition, cooperative learning is greatly promoted when creating working groups of up to 3-5 people from different countries and levels of study. They work together for two intensive weeks, with the common aim of finding solutions to the problem presented in the LOCUS exercise and without knowing each other, and this cultivates the development of different skills, like working out differences, solving conflicts, or negotiation and conciliation. It is also important to mention that the students who participate in these kinds of Erasmus programmes (such as LOCUS IP) come to understand other cultures and habits that are different from their own. They overcome the 'narrow view' of having only one reality. To paraphrase many of the participants, it fosters more European learning and global understanding, thanks to the experience of living and working together for a common purpose.

Concerning the task of solving accessibility in patrimonial environments, the procedures must be based on 'user-centred design', also frequently called 'experience based design', and not on the specific regulations of specific cities, because the regulations incoherently change from one region to another. What is more, according to many Accessibility Codes, we are not always forced to strictly follow the law in historical areas; alternative solutions can be accepted. For instance, the Catalan Accessibility Code [1995] states that the design of adapted paths in existing centres and protected natural environments admits alternative solutions, if the competent organism for this topic approves the project. The Government of Ireland similarly asserts in its Disability Act of 2005 when dealing with 'Access to heritage sites' (article 29.1.): 'The head of a public body shall, as far as practicable, ensure that the whole or a part of a heritage site (...) is accessible to persons with disabilities and can be visited by them with ease and dignity.'

If we can accept 'alternative solutions', it is absolutely fundamental, therefore, to understand the multiple needs of different users. For architects and architecture students, it is not about memorizing codes and rules (useful spaces, minimum widths, turning areas, maximum ramp slopes, etc.); but understanding how an impaired person moves and interacts so that we can find logical solutions to the problems. It is about comprehending the requirements in order to be able to apply logic and common sense to any situation, because each conflict has its own solution, which is probably unique and distinctive. LOCUS IP achieves this goal by organizing a simulation of disabilities directly on the site. On the first day of the workshop, all the participants experience the difficulties of being mobility or visually impaired: In the limited mobility simulation, they move around on crutches or sit in a wheelchair; in the visual impairment experience, they try to get orientated when walking around wearing low-vision glasses; in the complete blindness simulation, they use a cane.

# architecture

The objective is to allow participants to experience the impairment and the diversity of needs of the population first-hand, because putting oneself into another person's shoes is a method for intuitively finding out what is lacking in many current designs as well as how inclusive solutions are the answer. Thus, immersion into the subject through disability simulations is one of the best ways to understand how architecture should be accessible By experiencing first-hand the consequences of being impaired, the needs and obstacles of an impaired person are understood and assimilated much better. The different motions are internalized, the problems identified. Participants experience what can be done, what not, and, above all, why. A further discussion about regulations is encouraged: Why are laws and accessibility codes so diversified when compared to different countries and even different regions? Why do the requirements differ from one regulation to another? Indeed, people with impairments have similar special needs, without regard for where they come from. This reflection leads us again to the importance of fully understanding the reasons for the requirements and not simply memorizing the demands explicit in the ordinances.

Last but not least, LOCUS IP intends to open eyes, to bring the general public closer to the distant world of disabilities, to break the current taboos on natural human intercourse which ignore the reality of ageing and losing one's abilities. The goal here is to defeat the fear of the unknown and 'no way!' thinking. So often, in a disability simulation, there are people who are unwilling to sit in a wheelchair, or they refuse to move without using sight. Because of this, it is important to introduce the activity in a closer and friendly way, almost as a game, with a good sense of humour and jokes like, 'Don't worry, it's not contagious! You'll be able to stand up again.' By bringing diversity (functional diversity, as it is commonly called in Spanish) into normality, people can be familiar with impairments. It is also important to note that part of the teaching staff (and some students as well) were people with disabilities, either visually impaired or wheelchair users. They provided particular insight into the design pedagogies and, in accordance with Bernadi and Kowaltowski's [2010] research paper on education for universal design, an increase in student sensitivity and a deeper understanding of users' needs were ensured and enhanced.

The goal, at the end, is to learn how to apply logic and common sense to any design decision, in order to achieve 'design for all' and meet everyone's expectations equally. There are many words nowadays used to describe such concerns, like, 'usability', 'user-friendly', 'user-centred design', 'experience based design', etc. All of these refer to finding the user's satisfaction in the design. But we cannot forget that accessible design will only be broadly accepted, and therefore used by everybody, if it is both functionally usable and aesthetically pleasant. The requirement of designing an accessible solution cannot be imposed over certain aesthetic needs. Indeed, some accessible designs often have a regrettable hospital look, bringing an emotion of sickness and discomfort and generating despair or sadness. The design of spaces can affect our mood, they interfere with human psychology to the point that, in certain places, 'we may start to forget that we ever had ambitions or reasons to feel spirited and hopeful' rather than how a beautiful place makes us feel cheerful and more satisfied because 'our sense of beauty and our understanding

of the nature of a good life are intertwined' [de Botton, 2006]. Human needs and values should be met with equally functional and aesthetic designs.

To sum up, students are encouraged to explore human diversity by means of disability simulations, to embody and conceive multi-sensorial architecture, to pay attention to other (often lately forgotten) aspects of design, such as sound, temperature, texture or colour (which may be basic for persons with special needs, but also useful and pleasant for others). In this manner, the participants become researchers and users simultaneously, directly involving themselves in the activity. Thus, the aim of 'design for all' becomes their own goal and benefit. This is why LOCUS IP focuses on introducing barrier-free architecture into academic education and, most importantly, how to do it in a way that engages the participants so they understand that it is not about 'architecture for the disabled' but architecture for all, i.e., inclusive architecture. For this reason, it is extremely fruitful to teach intensively, organize disability simulations, and share experiences with other 'functionally diverse' people, especially in a fun and normalized way.

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# Designing for diversity from diversity

Aiming to improve access to historical sites that were designed to be inaccessible to external threats, LOCUS has been a program that any student aiming to be a design professional should experience.

Even more than the challenge of creating solutions for improving access to urban environments, what really makes LOCUS a unique experience is the fact that human diversity is in the DNA of the program:

Architecture teachers and students from different faculties around Europe meet in an unknown environment, each one with their own experiences, their own capacities and languages, their own sensibility towards human beings and architecture. They interact with the locals and interrogate both the stones and the social environment to arrive at a creative solution that, on the one hand, is a result of the effervescence of the working groups' diversity and, on the other, is a gift to be left on site as a reward for the enriching experience provided over fifteen days.

I have enjoyed and learned something from every edition.

I have seen how the professors that repeat the experience every year value the richness of human diversity as a source of creativity.

The collective dream of a better future for our selves comes closer to reality, thanks to the LOCUS approach. Being that this program is an academic exercise, the only thing that I regret is that nowadays professional practise is a far cry from this excellent methodology. Let's hope that the participating students, the professionals of tomorrow, will take their practise in this direction.

Ankel & Fany Cérèse

Architects, teachers

École Nationale Supérieure d'Architecture de Montpellier, France



# Architecture and quality of use: building for all benefits all!

Environment creates, limits or eliminates the situations of the handicapped

Everybody can experience reduced mobility either temporarily or permanently from disease, accident, pregnancy or age. But most of the time, disability is the result of obstacles found in the environment. However, an accessible environment verifiably benefits all of us, and that is a factor of safety and comfort which also helps to maintain people's autonomy.

The 'handicapped situations' can be defined as the impossibility or difficulty that results from the conflict between an individual's functional and social capacities and the environment in which he/she has to use them.

Each place imposes its physical, psychological, economic constraints. Every individual, every user has his own physical, psychological, economic abilities. Any gap between the constraints of a place and the user's capacities creates a 'handicapped situation' through difficulty or impossibility.

A disabled person in an adapted environment can then have the same opportunities as an able-bodied person. Conversely, an able-bodied person in an unsuitable environment is in his turn in a handicapped situation. This notion is interesting because it no longer refers to the person's disability but to his/her environment.

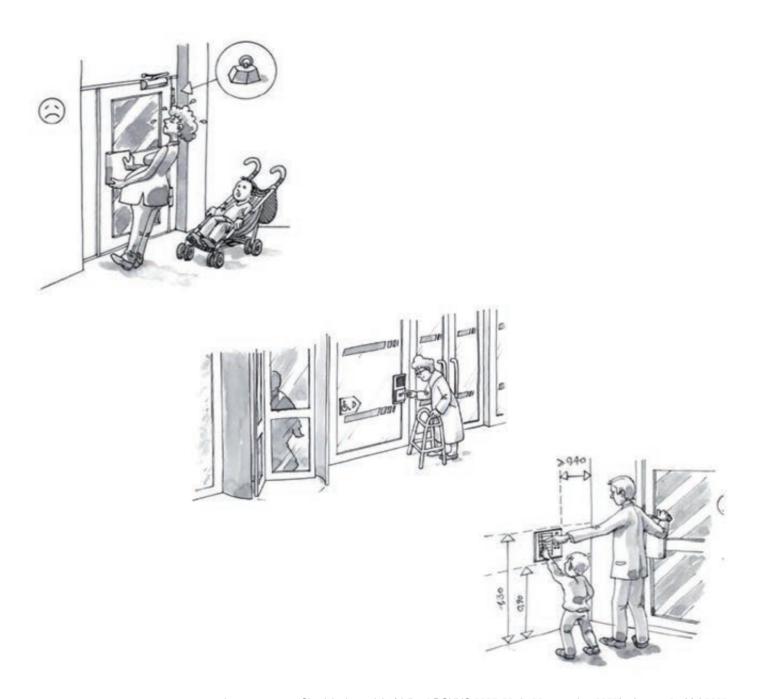
The comfort or quality of use

The comfort of use expresses itself through the capacity of a space to fulfill the users' expectations, to allow activities to progress well in the way the space is intended, to avoid placing the users in a handicapped situation.

To conceive spaces by developing quality of use means putting the use of spaces and the user at the core of architecture, in all its wealth and variety; it doesn't matter if you're big or small, fat or thin, young or old, disabled or able-bodied, disoriented, foreign, ...

Accessibility is not only intended for disabled people; it deals with contributing to and conceiving of an accessible, useful and comfortable environment for all, allowing each person to exercise their citizenship, to be autonomous and integrated into society.

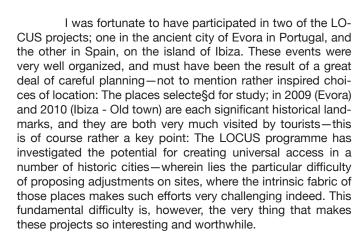
It is in this spirit that the LOCUS project contributes to educating and training the future actors of the built environments for our societies and the way of life of their citizens.



Images source: 'Circulaire interministérielle n° DGUHC 2007-53 du 30 novembre 2007' - Annexe 8 - Mai 2008

John Cramer Project Leader

Lund Tekniska Högskola, Sweden



From my observations in a general sense, the LOCUS programme has done a terrific job on several fronts: Students and Tutors from a wide variety of backgrounds have met, lived together and worked together. This was in situations which were simultaneously very enjoyable, and where great efforts were made to work with the task of addressing mobility issues in very challenging environments that were represented by these historic sites. It was important that we met; that we made new friends and that we worked hard.

For myself there have been some very positive spin-off effects resulting directly from LOCUS: I met new colleagues with whom it has been possible to expand the scope of activities



and contacts between our schools. Our students from Lund were subsequently made most welcome in Lisbon (Portugal), where we were kindly looked after by Professor Pedro Rodrigues. I will have in the very near future a new teaching partner in the person of Professor Holm Kleinmann from Oldenburg. Holm has agreed to run a short workshop in Lund-to kick-off the Schindler Award Competition—which we have included in our 4th year architecture programme. For two students from Lund, Haydar Alward and Mikael Pettesson, the LOCUS Evora project was particularly significant; this pair subsequently worked together on a final diploma project for the 2010 Schindler Award. I know that their choice of project was directly related to issues that arose from experiences on the Evora project. Haydar and Mikael made a very good project; they worked hard and made a very serious effort-which was nicely rewarded with second place in the Schindler Award.

This year, the spirit of LOCUS is to be continued in the newly formulated LOTUS programme, which will focus on the city of Bonifacio on the island of Corsica. I am running the 4th year Competitions studio in Lund, and the 4 students who will be travelling from Sweden to Corsica are all engaged in the 2012 Schindler award. I cannot imagine a better training for them than to take part in one of these excellent projects!



## Hanna Grabowska-Palecka

D.Sc., Ph.D. Architect, Professor of Urban Design

Politechnika Krakowska, Poland



## Accessible city – life without barriers

(Reflections from a participant in the ERASMUS Intensive Programme 'LOCUS' 2008/2010)\*

On November 10, 2006, the ceremony of presenting awards and honourable mentions in the second edition of the student urban competition 'Schindler Award "Access for All" 2005/2006' was held at the famous Congress Centre in Lucerne. From among eighty-eight designs prepared at European schools of architecture concerning the renewal of a fragment of Paris, the international Jury, supervised by Prof. Thomas Sievers, selected ten works to be nominated for awards and honourable mentions.

It was good that the invited authors of the designs and their supervisors met at the formal gala. Being among the honoured students from the School of Architecture, Cracow University of Technology, I had the pleasure of meeting the laureates from Spain. Their supervisors were Prof. Miguel Usandizaga and Dipl. Arch. Marta Bordas of 'Escola Técnica Superior d'Arquitectura del Vallès' in Barcelona. This encounter initiated our friendship and cooperation during the three-year Intensive Programme 'LOCUS – Let's Open Cities for Us'.

To my students and me, the possibility of participating in IP LOCUS was an important and inspiring experience. For years, teaching design at the Institute of Urban Design, Faculty of Architecture, Cracow University of Technology, I was able to acquaint myself with the systems of educating architecture

students at other European schools. In spite of a number of differences in these systems, the students' designs revealed a tendency to value the form and construction above solutions that were friendly toward all users, including those who have been discriminated against up to this day. It was particularly noticeable in the post-communist countries (e.g. in Poland) where—after long years of architectural restrictions—new economic and political opportunities opened nearly unlimited (not always accepted) searches for new forms. Obviously, it was reflected in the ways and effects of teaching young architects.

This situation changed gradually in the last decade of the previous century when the philosophy of 'universal design/design for all' was introduced (with certain reservations) to the European architecture universities. Many years of activity on the part of the United Nations, the Council of Europe and the European Union institutions, whose programmes included improving the situation of the disabled aside from guaranteeing safety, economic and social progress as well as protecting the citizens' freedom, rights and interests, were significant here. Drawing people's attention to the right to participate in social life for the rising number of handicapped users also pushed architects to adopt a new approach to design where friendly and humanistic solutions became a priority instead of formal and constructional solutions.



Unfortunately, a lot of negligence was left after the bygone period, namely:

- lack of sufficient knowledge of the degrees of disability and handicapped people's needs,
- lack of active involvement in the communities of disabled people,
- lack of suitable regulations and designing guidelines,
- lack of professional surveys concerning architectural and urban issues related to design for all,
- lack of sufficient knowledge among designers.

All these faults were eliminated gradually:

- owing to the campaigns organized in European countries for making societies accustomed to disability problems,
- owing to the famous Amsterdam Treaty, signed on October 2, 1997, the first European treaty addressing the problems of disability,
- owing to the so-called Madrid Declaration resulting from the European Congress in Aid of the Disabled, held in 2002 in Madrid under the banner: 'nothing about the disabled without the disabled',
- owing to the declaration of 2003 as the European Year of People with Disabilities.
- owing to some significant legislative changes and the activity of non-governmental organizations in aid of disabled people,



owing to some changes in the education of future architects.

Today, after so many years, European societies understand that disabled people have their right to freedom and full participation in all spheres of life; that they want equal opportunities instead of pity; that the main condition of their independent lives and activity is the removal of all environmental, architectural, urban and transport barriers.

Such an approach obliged architects, urban planners, municipal authorities and boards to view city shaping from a different angle when considering the still limited accessibility of public objects and spaces. Special difficulties could be seen in historical cities, those with complicated topography which —on account of their monuments and their past—form the world's cultural heritage.

The new situation and the new assignments for architects required constant supplementary education and exchanges of experience while getting acquainted with the principles of shaping an environment without barriers. Numerous national and international scientific conferences as well as European and national designing programmes and workshops for architecture students were devoted to this theme. They included meetings about the accessibility of historical cities during the Intensive ERASMUS Programme 'LOCUS – Let's Open Cities for Us'.

The participation of the students of the Faculty of Architecture. Cracow University of Technology in design workshops organized in Girona, Spain; Évora, Portugal; Ibiza, Spain-attractive historical cities with complicated topography-became a serious challenge. Future architects' outlook on the priorities in design were dramatically changed by having contact and designing collaboration in international teams of students from Spain, Portugal, Italy, France, Germany, England, Sweden and Romania; field exercises; sightseeing with assignments simulating various degrees of disability; contact with disabled people; and lectures delivered by professors from various universities.

To sum up the effects of the Intensive ERASMUS Programme 'LOCUS - Let's Open Cities for Us', which finished in 2008, we can present the following conclusions:

- The problems of the workshops and the main assignment, 'design for all', ought to make rendering cities and objects accessible one of the most important tasks for architects as well as municipal authorities and boards.
- The choice of the cities which organized the workshops. their scale, unique attractiveness and historical diversity as well as the possibility of acquainting the students with a given country, their landscapes and culture deserve special emphasis.
- The excellent organization of the workshops, the opportunity of intensive work for the students, the diversity of the objects where the workshops were held, meetings with the municipal authorities, the possibility of visiting other places and cities brought about some interesting propositions and effects.
- The unique educational value of the workshops was created by accompanying professorial lectures as well as meetings with disabled representatives of organizations who supervised field exercises.
- The possibility of integration and cooperation for students from nine European architectural universities in international teams, exchanging experiences in teamwork and enhancing relations.
- The possibility of integration and cooperation for the academic staff, supervising the students' work at the workshops.
- The effect of the workshops in the shape of interesting design propositions presented by the students at an exhibition and submitted to the municipal authorities.

- The students' aroused interest in the problems of design for the disabled which resulted in successes at the prestigious Schindler Award 'Access for All' competition, the themes of diploma designs as well as the all-Polish student design workshop 'Designing in the Dark', organized at the Faculty of Architecture, Cracow University of Technology.
- The final success of IP 'LOCUS' made it possible to continue the problems of rendering cities accessible for disabled people in the form of another three-year Intensive Programme, 'LOTUS - Let's Open Tourism for Us' (2012-2013), supervised by École Nationale Supérieure d'Architecture de Montpellier in France.

<sup>\*</sup>I would like to extend special thanks to the coordinator of IP 'LOCUS' -Arch. MARTA BORDAS and Prof. MIGUEL USANDIZAGA.

I wish Arch. Arch. ANKEL and FANNY CERESE further successes at IP 'LOTUS'.





Tactile model in Cracow's city center

Markku Hedman
Prof. Architect

Tampere University of Technology, Finland



## From accessibility to inclusive urbanism

I first met the professors Marta Bordas and Miguel Usandizaga in Lucerne on 14th November 2008. The meeting took place during a prize-giving ceremony for the Schindler Award 2008, which is a competition that challenges young architects to place 'Access for All' at the centre of their design philosophy. That meeting initiated the co-operation of the Locus-programme and the TUT School of Architecture. Our school had a splendid opportunity to take part in workshops in Évora (Portugal) and Ibiza (a Balearic island, Spain). In addition, Marta, Miguel and architect Carlos Mourão Pereira visited our school as invited lecturers in an international seminar titled, 'Accessibility and Cultural Heritage', in March 2010.

Accessibility has been an important issue at TUT School of Architecture for a decade. We have organised regular courses and seminars dealing with the issue. However, the cooperation with Locus-programme and the exchange of knowledge and ideas between other schools has had an active role in deepening our understanding of the 'access for all' ideology. In Finland, accessibility has traditionally been interpreted as 'barrier free' design. The primary focus has been on developing correct solutions for the design of built environments, either functionally or technically.

Cooperation with the Locus-programme has helped us to understand that the traditional barrier-free viewpoint should be broadened. At present, the concept of barrier-free environments in Finland is, above all, about the removal of physical obstacles that hinder the ability of physically disabled people to operate. It is obvious that the built environment should also take into consideration the visually and hearing impaired as well as the influences that various illnesses such as dementia have on people's lives. However, this is not enough. It should be a matter not only of compensating for handicaps but also of taking into consideration natural differences between people. A good example is children, whose special position as users of built environments is commonly forgotten. Also a deep understanding of the health effects of the built environment is needed: The urban and dwelling environment should promote the maintenance of the user's ability to operate spontaneously.

The term 'inclusive urbanism' marks an important step away from regarding 'access for all' as merely a concept for detailed building regulations or technical rules about access to buildings. This means the creation of an environment that is equally available to all and culturally inclusive. People have the right to actively participate in the activities created by the built environment and in forming its identity. Income levels, social status, country of origin or skin colour must not influence the right to participate in urban life and culture.

There has already been a shift from the era of monoculture and uniform housing pathways to the era of the multicultural society and changing life practices. Housing construction in Fin-

land lags behind in this sense because it still produces uniform dwellings for an ethnically homogenous nuclear family. Taking multiculturalism into consideration, it is related not only to the special needs of immigrants but also, equally important, to the growing cultural diversity of Finns. From a changing culture, diversity follows on all levels: in home furnishings, the spatial properties of dwellings, housing typologies and urban fabric.

Developing a culturally interactive and inclusive society creates the prerequisites for international competitiveness. It increases the economic and spiritual wellbeing of society and promotes the implementation of socially and culturally sustainable living environments. Multiculturalism does not mean losing collective history or forgetting one's own roots; it leads, rather, to the diversification of the built environment and cultural wealth. Accepting peoples' differences: facilitating encounters with things that are different; strengthening the identity of the resident and the residential community: promoting social forms of dwelling: all of these are some of the most important challenges for housing design in the future. We need an in-depth understanding of the starting points as well as skilfully designed architecture. Ecological responsibility also means a richness of lifestyles. It requires that we develop our present one-sided living environment to make it increasingly more diverse. Only then will housing design have the opportunity to engage people with a polyphonic voice.

Architecture is the image of a human being. If architecture is exclusive on an experiential level, a human being cannot feel complete. One important element of accessible architecture is to enable all people—despite their handicap—to rediscover themselves as complete physical and mental beings. This event happens always in a certain historical and social context. Therefore, this experience is not only about spatial qualities, about materials, about detailing. It is just as much about atmosphere, identity, culture and, most importantly, about history.



Seminar is open to all. Seminar is in English.

Lisätietoja: www.tut.fi/ark

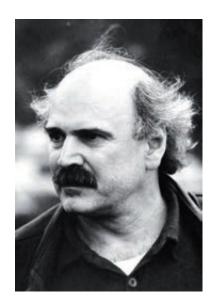
limoittautumiset 18.3 mennessä: anna helamaa@tut.fi Registrations by 18.3: anna helamaa@tut.fi

IN FINNISH / SUOMEKSI

### Holm Kleinmann

Prof. Architekt BDA

Jade Hochschule Wilhelmshaven Oldenburg Elsfleth, Germany



Having participated in over 17 international Socrates/ Erasmus-Intensive Programmes (IPs) since 1996, either as a project leader or as a partner, I have been involved in a wide variety of architectural and urban design topics; from dealing with specific waterfront situations, new ideas for abandoned industrial buildings, Mediterranean markets, to commercial urban places, etc. - and the LOCUS project has been an exceptional experience for me in the following three ways.

Firstly, the title LOCUS - 'Let's Open Our Cities for Us', which immediately evokes the questions 'Are our cities not supposed to be accessible for everyone? Isn't the city a universal space for its users?' Even while preparing the first surveys in Oldenburg (Germany), which has almost totally flat topography, we were surprised to discover many details limiting accessibility for mobility-impaired and otherwise handicapped people that we had never taken into account in local public buildings or spaces. We had to face the fact that segregation and discrimination continues to occur in the built environment. Architects and urban planners should be aware of the social, economic. and ethnic effects of these spaces - in addition to the problems these spaces can create for the elderly. LOCUS calls for an increased awareness and consideration of what architecture and urban planning encompasses. It reminds us of the basic understanding, that the population is diverse, that everyone has a right to lead a dignified life, and the necessity of independence regardless of age, gender or ability. Accessibility in the public space has to be risk free for all its users. This doesn't deny the

meaning of aesthetics, but points out its significance in a more complex architectural and urban approach, in which accessibility plays a fundamental role. LOCUS redirects the contemporary emphasis on the sensational and trendy influences of architecture towards the integrated consideration of the needs of society as a whole. It refines our environmental and architectural perception by increasing our awareness of the spaces we move in, around, and through - in regards to their material, colour, texture and overall accessibility. LOCUS demonstrates the necessity for an increased sensitivity and more comprehensive perception of these issues.

Secondly, the exchange between students and teachers during the workshops is of an outstanding quality. This is a phenomenon common to workshops of this kind. From the very outset, there is an underlying understanding and acceptance of one another, and no hesitation to form working groups. Whether the participant is a teacher or a student, there is a passionate will to cooperate and a curiosity to learn during these two weeks. But the LOCUS projects enhance this positive attitude in an exceptional way: it is the topic that attracts this particular group of students. From the beginning, they are deeply engaged in the subject and the interconnected implications of forming new perceptions of site, space and details. There is an inherent bond with people and their disabilities—a solidarity that youngsters show towards the aged and infirm. This element forms, in particular, an extraordinary working relationship amongst the participants.







Thirdly, there is the wonderful cooperation with both initiators, Marta Bordas and Miguel Usandizaga. My first meeting with Marta Bordas took place in 2003—when she was still a student and participated in an IP in Oldenburg (Germany). Her charming nature, and unpretentious handling of her handicap, made the time we spent together a natural, easy, and unselfconscious experience. Placing her in charge of the LOCUS-project was a brilliant choice, in terms of her clear understanding of the issues and capabilities of professional management and organization—one of the many great decisions Miguel Usandizaga has made within the context of LOCUS. Recently he told me, that his cooperation with Marta Bordas had opened his eyes to an architecture dedicated to life—one that allows people to live their lives better. In my opinion, this is main premise of the LOCUS-project.

Therefore, on behalf of all the participants, we say 'Thank You'—and I say 'Thank You for your friendship!'

Finally, I would like to note, that the continued funding of IPs is one of the best and most appropriate investments in the idea of Europe.

Carlos Lameiro Prof. Ph. D Architect

Universidade Técnica de Lisboa, Portugal



I like these kinds of MEETINGS.

I like, in these days, ALL OF US being as the primitives, in some kind of communal life.

I like the day of ARRIVAL, one and another and another..., like coming to a convocation of Druids, ... since the last one.

I like to GO, around and around and around.

I like to SHARE smiles, glances, talks.

I like to SHARE a seat of a car, or a bus, an umbrella, a meal, a drink.

I like to SHARE news, impressions, ideas, doubts, difficulties.

I like to SHARE the wheelchairs, the walking sticks, to be used for sensing and understanding.

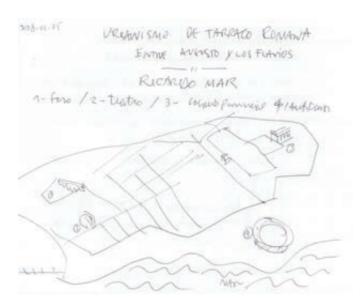
I like to SHARE all the work to do.

I like to SHARE in situ.

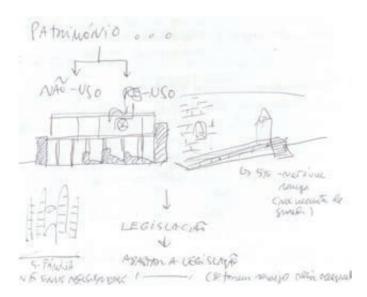
I like the courage of courageous INDIVIDUALS.

### OBSERVE

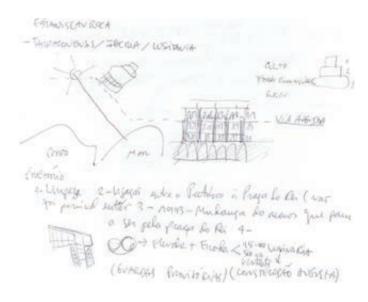
We observe the SPEECHES in the places where we go.



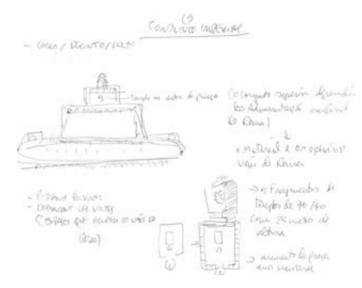
We observe the SPEECHES about the examples to be studied.



We observe the SPEECHES on the best practices to use.

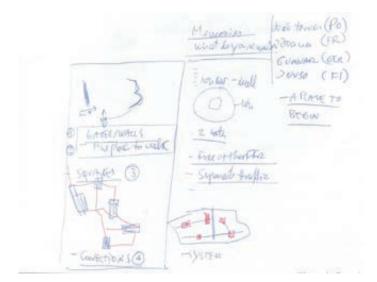


We observe the SPEECHES on the history of the site.

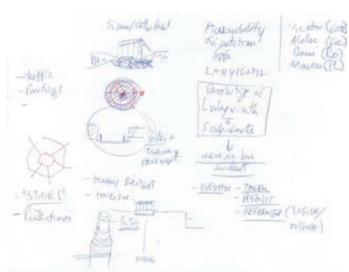


### FARN

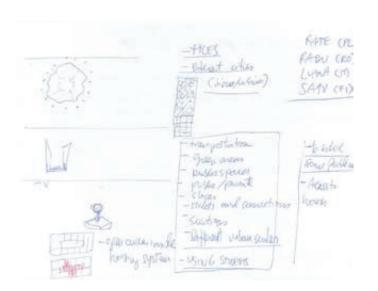
We learned about 'MEMORIES, WHAT DO YOU REMEMBER'.



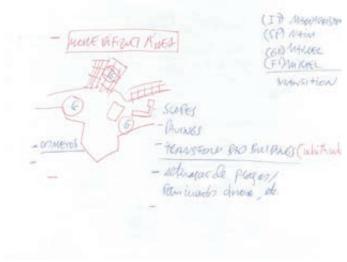
We learned about 'LABYRTHNS'.



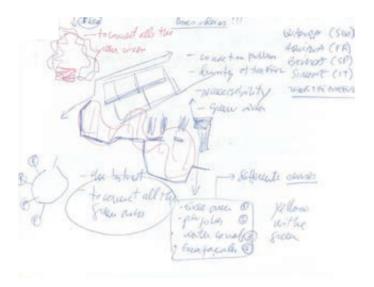
We learned about 'USING STREETS'.



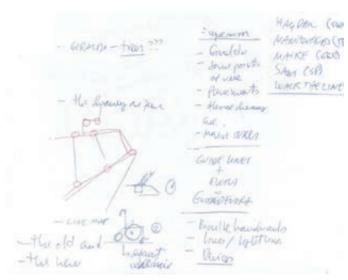
We learned about 'CREATING A NEW LINK'.



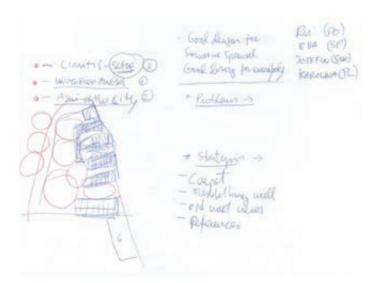
### We learned about 'WALK THE GREEN LINE'.



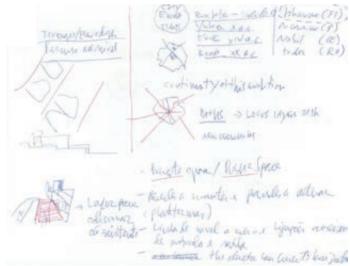
### We learned about 'GUIDED ÉVORA'.



### We learned about 'A LINE LIFE FOR ALL'.



### We learned about 'NEW LAYERS'.



### Valerio Morabito

Prof. Architect

Università Mediterranea di Reggio Calabria, Italy

PennDesign University of Pennsylvania, USA



# Landscape accessibility

For years, I have attended a number of workshops on pedestrian accessibility as part of the Erasmus IP LOCUS.

Although my experiences during these workshops were interesting, I was especially intrigued by the challenge of designing particular types of access necessary for those with different disabilities who need to easily engage difficult city spaces around the world and, more specifically, in European cities, where the workshops were organized.

During the workshops, I tried to understand the role of architecture in designing or redesigning a space in relationship to the new priorities set forth and, particularly, how the traditional spaces of historical cities could be altered to respond to the particular needs of the disabled. Experimentation in the workshops quickly highlighted the impossibility of thinking about accessibility issues without taking into serious consideration the necessary issue of alterations that may changethe identity of city spaces. Is it possible to solve accessibility issues for people with limited mobility while framing a new vision of contemporary society within the evolution of historical cities?

Blind people, people using wheelchairs and other mobility-impaired people were the subjects of our reflections (projects), specifically in terms of how people with these disabilities might enjoy cities with more ease. So we implemented lifts, ramps, particular paths and other new devices and elements for crea-

ting easier conditions for everyone to use the city spaces. Changing the space, they shift the original historical functions of the cities: to prevent enemies from coming in. In many cities, walls were built to ensure safety, but now we have to alter their functions and, instead, invite people inside.

I was fascinated by this concept. How is it possible now to manipulate the history of a city and to create a new contemporary identity that not only meets the needs of the whole community, but more importantly, prioritizes accessibility?

To make this possible, we have to work with a different fluidity of space, and I thought the method of landscape architecture inherently works with this attitude towards fluidity and accessibility. Let me explain what this attitude is. Landscape as a process is a methodology for composing space without the limits of architecture; it is an explanation of the geography and, by using the scale of urbanism, it gives 'poetry' to urban space.

Since the Renaissance, we have perceived space with a particular view generically called perspective. The new possibility of computers and representation programmes 'shows' us a new imaginary world of perspectives, based always on the first rule of the Renaissance. We have learned this rule for many years and now it seems perfectly natural. But I think it is neither natural nor better, it is a limitation of our natural skills about perception.



New Fish Market in Huelva, Spain, 2010



Redevelop of Piazza Amadeo Savoia, Peschiera del Garda, Italy, 2011

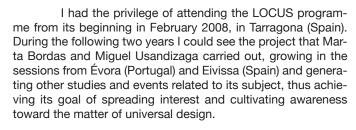
People usually focus on their ability to see; but if engaged more, all of our senses could be improved and our behaviour may begin to shift. For example, if we place a ramp instead of stairs in a public space, we tend to choose to use the ramp, not because it is only easier to walk through, but because it is an easier way to perceive space; it guides us with certain fluidity. If we walk through a space composed of the 'smell of vegetation', or if we pass through the sound of leaves being moved by the wind, we can close our eyes and experience the space of smell and the space of sound. Our surroundings, whether we are aware of it or not, change our behaviour. If we, as designers, understand the many possibilities of perception better, we could create and compose a fluidity of space not only with the geometrical measure of the space, but also with the sensorial measure of the space.

Accessibility, connected to this new attitude towards landscape, becomes the method used to improve the identity of a space. It can change the identity by shifting the perspective of the space itself, expanding the limits to include the dynamic factors of sight, sound, smell, and culture. A successful landscape project should involve all these factors and use them to create a coherent and balanced configuration. If we could design with such intention, we could truly begin to shift the identity of historical landscapes and begin to explore and benefit from both an accessible landscape and a landscape that is rich with colour, texture, sound, and culture.

## Vlad Thiery

Architect, teaching assistant

Universitatea de Arhitectură și Urbanism 'Ion Mincu', București, Romania



For the students and me, the workshop provided the first opportunity to directly experience the problems of accessibility in the built environment. The simulations we took part in were more important and eloquent than anything you could find in books. Some details regarded until then as minor proved to be elements that can make a design accessible or not. In this way, I realized how designs can either create obstacles that are impossible to pass or they can generate an environment accessible to all. Now I consider the accessibility simulation as an essential part of the education of each and every designer and the best way to generate empathy, which is essential in the relationship between the architect and the user.

The excellent lectures I attended during the workshops revealed a number of essential aspects concerning accessibility, aspects that the standards and regulations do not explain. Thanks to those lectures, the understanding of the phenomena made the subject of accessibility—so barren in its standard presentation—comprehensible and easy to remember. The case studies presented during the lectures showed the princi-



ples of universal design when applied to good architecture and were an impulse for the workshop case studies, as well as for the future works.

Living and working together with teachers and students from different countries and cultures was a challenge for overcoming the inherent obstacles of communication and finding the tools to provide a broad accessible means of expression in order to achieve a common goal.

For the first time, I had the opportunity to learn the ways architecture can be communicated to and by a visually impaired person. The way Carlos Mourão (special collaborator of the LOCUS Programme and a blind architect) understood the projects of the workshop or explained his ideas, along with the tactile and sound presentations of architecture, all of these opened me up to some new ways of thinking about architecture, which are now part of my teaching activity and my practice.

The projects conceived during the workshops, developed the concept of accessible design, generating a much more valuable architecture for all its users, creating a sensitive design that allows everybody to discover less known aspects of the city. Working in old cities, some of them on the UNESCO World Heritage List, was a great opportunity for the students to deal with protected areas and a built environment. Their projects were conceived with respect for the cultural heritage, being also designs for a living and friendly city for both its inhabitants and its visitors.



Working together for two weeks enabled the participants to form a team, thus giving us the opportunity to discuss matters regarding teaching and professional activity. For the students, the mixed team system (each student in a team was from a different university) was a good chance to communicate, to deal with new ideas and approaches, and to get the best from this for the benefit of the projects.

Nowadays, the topics of the workshop have become the subject for diploma projects or PhD theses; accessibility is the main topic in other Erasmus programmes; and the awareness of universal design principles is increasing; thus, the objectives of the LOCUS Programme have been fulfilled. I am happy and proud to have participated in this programme, and I believe that being partners in this programme is a great achievement for our university.

Now, when the topics of the workshop have become subject for diploma projects or PHD thesis, when accessibility is the main topic in other Erasmus programmes and the awareness of universal design principles is increasing, the objectives of LO-CUS Programme have been fulfilled. I am happy and proud to participate in this Programme and I believe that being partners in this programme is a great achievement for our university.

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