



COLOUR, MATERIALS AND LIGHT IN LIBRARIES OF THE XARXA DE BARCELONA

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The context of the **knowledge society** has substantially changed the role and the way the **public library** should act facing its community. If traditionally libraries have been the place where citizens have access to **information** and **culture**, in the knowledge society, libraries should wish to be a **centre** for stimulating local **creativity**, for generating new **knowledge** from the information they contain.

When Manuel Castellsⁱ analyses the knowledge society, he distinguishes between what he calls “space of flows” and “space of places”. He defines “**space of flows**” as the collection of information flows which cover the telematic networks, in which **identities** are diluted. Additionally he defines “**space of places**” as the physical space where we live, which represents the expression of identity. So in the new social paradigm, what is local, what is deep-rooted to the place, gains a leading role in the **identity reaffirmation**, as a counterpoint and complement to what is global. In this sense, we believe that the capacity of **architecture to take root in a place** is a stimulating element of the community’s **local character of identity**.

We think that **architecture** is an element which should contribute to the mission of the library to **affect** and **excite**, to generate creativity. The architecture of the library can help **giving sense** and **creating meaning** for the community, so the library becomes a **community referent** in the common imaginary. Some of the plastic instruments of architecture which are efficient in this sense are the use of **colour, materials** and **light**. We consider ourselves lucky to be working on projects in which these elements have a special meaning to the service of community.

In this presentation we show different buildings of libraries in which we believe **the experience of space and architecture become an experience which generates new meanings and new referents**, which enrich the community’s cultural identity and in which **space has been consciously defined architectonically through colour, materials and light**. We believe that through these projects how **architecture can become a powerful instrument at the service of the community, generating sense and reinforcing collective identity** is illustrated.

“Architecture is always a concrete matter. Architecture is not abstract, but concrete. A plan, a project drawn on paper is not architecture but merely a more or less inadequate representation of architecture, comparable to sheet music. Music needs to be performed. Architecture needs to be executed. Then its body can come into being. And this body is always sensuous. All design work starts from the premise of this physical, objective sensuousness of architecture, of its materials. To experience architecture in a concrete way means to touch, see, hear and smell it. To discover and consciously work with these qualities –these are the themes of our teaching”. (Peter Zumthor)ⁱⁱ.

Given the limited time we have, we will only give a small overview to all of them, but it



will be enough to perceive the **different approaches of the architects when facing the project, as well as in the manner of treating colour, materials and light.** We will also see that they start from **different conceptions of the act of reading**, always with nuances from the **intimacy** of reading.

The libraries that we present are a part of the **Xarxa de Biblioteques Municipalsⁱⁱⁱ** of the province of Barcelona. These libraries are the result of the work by the **Gerència de Serveis de Biblioteques^{iv}** of the Diputació de Barcelona over the last decade.

In the **province of Barcelona** there is a population of more than 4.8 million of inhabitants in 311 municipalities and it is located in Catalonia, Spain. Gerència de Serveis de Biblioteques (from now on GSB) supports a network of **199 public libraries** and **9 mobile libraries** (information from May 2010) and it also supports town councils in planning and creating new libraries.

The **Unitat d'Arquitectura Bibliotecària** assesses municipal technical services, during the process of projecting, building and equipping the indoors of the new library buildings, as well as during the refurbishment of existing libraries. We are currently working in approximately **100 projects** in **83 municipalities**. Through daily work in the unit we can see good examples of projects that illustrate the ideas that we have discussed.

1 Colour



With the **Biblioteca Jordi Rubió i Balaguer^v**, in Sant Boi de Llobregat (opened in 2005) we started a series of three projects that will illustrate on the use of colour. In this case AV62^{vi} architects suggest an **all-embracing use of colour**, so a certain colour code is repeated on **façades, furniture and indoor graphic elements**.

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Graphic designers were incorporated to the team, who projected the building in a very early stage to define the precise **colours** that should be used in the façade of the building. The same colours are used in furniture and indoor signs, as we can see in these images, to refer to the different parts of the collection.



This way colour becomes an essential element of **wayfinding signs**, so the user can associate a certain colour with an area of document content, and a place in the physical space of the library.



This led to the design of a **flexible system** which permitted the exchange of colours in furniture accessories, which could be harmonious with future redistributions of the collection.



The fact of associating colours to the contents of the library, as well as their use on the façade allows for the exterior image of the building to be a metaphor, an advance of what the reader will find inside.



In order to describe the external appearance of the **Biblioteca Sagrada Família**^{vii}, in Barcelona (opened in 2007) the architect Manuel Ruisanchez^{viii} explains “A perforated aluminium filter acts as an opaque surface that reflects the sun during the day and creates the illusion of the awakening of a lamp during the evening and at night”^{ix}.



When describing the colours the architect explains: “The light filters the space of the three floors in two colours: the white of the ceiling and the central space and the black

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of the paving and the outer part of furnishings. For the majority of parts of the library neutral colours were chosen with the purpose that the books would contribute to the colour touches"



In the photographs can be seen how black is used as a background colour for the furniture in the whole library. It is the neutral element on which books and people stand out, because they bring colours and life to the place. And he adds *"The green of the children's library, different and bold, stains the light of the call and consultation area. In this way, a select reading and learning atmosphere is created on the inner street"*



On another point he says *"In the lay-out of the furnishings, the predominant features are experimentation and the idea that the interior space is an urban maze, with the aim of using the image of urban diversity and changing its scale to characterise unique*

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spaces that can be identified, in which users are able to recognise places, streets, corners and squares; moments that conceal information: the library collections”



The architect uses colours on the background of the shelves and on the gables of some furniture pieces to qualify these spaces. Therefore colour is used here with a **guiding function**, almost like wayfinding signs, identifying each place.



The **Biblioteca del Sud**^x, in Sabadell, was projected by Juan Pablo Saucedo and Lluís Pérez de Vega. Building management and furniture are responsibility of Josep Palau and Pere Puig, municipal architects. It was opened recently, in April 2010.



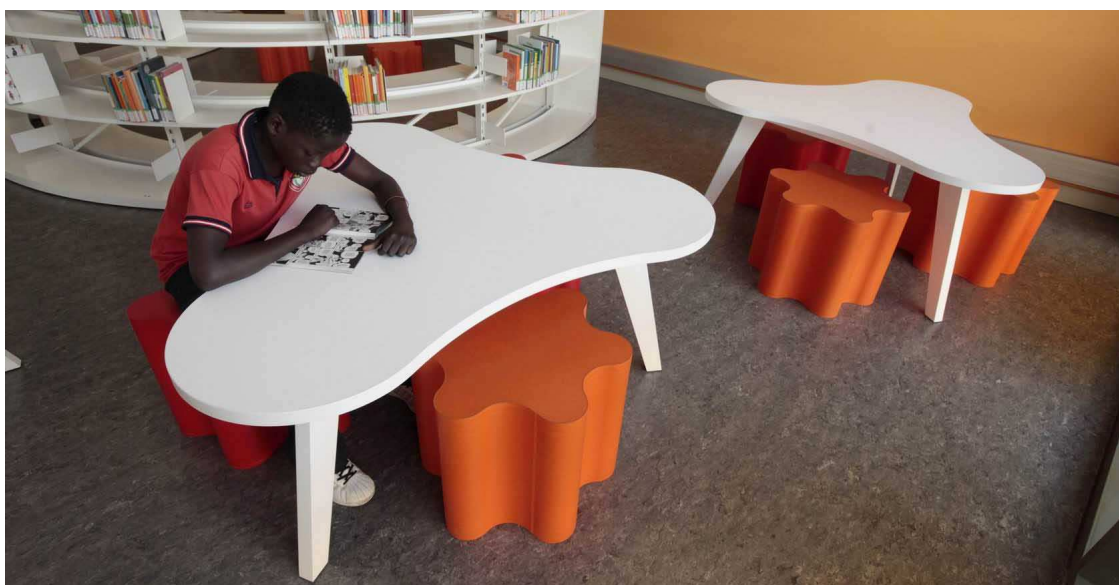
In this library, just like in the first one we have seen, **white** is used intentionally to define areas of concentrated reading.



As a counterpoint, vivid and bright colours are used in those spaces of the library where **informal** and **ludic reading** is to be promoted, to encourage **reading** as a **leisure activity** and a source of **pleasure**.



Bright colours have been used to highlight seats in the comics and travel guides area, in the novel area and the children's area. This has been accompanied by the choice of seats with a design which emphasises the will of **informality** and **leisure**.



Orange and red have been given exclusively to the children's area and also to the basement floor, to clearly differentiate these spaces from the rest of the library. In the children's area we can also notice that informal furniture has a bright design and bright colours.



2 Material



With the **Biblioteca Jaume Fuster**^{xi}, in Barcelona (opened in 2005), work of Josep Llinás^{xii}, we started the analysis of the use of materials as architectural means.



In this library the architect used **wood** to cover walls and columns up to a certain height. This way, spaces of human scale in the huge dimensions of this library are defined, as if it was intended to envelop readers in order to isolate them, to make the act of reading more intimate. Josep Llinás has expressed in different occasions his will of promoting the **intimate nature of reading**, for which he thinks a cosy and warm atmosphere is necessary.

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Spatial complexity in the projects of Josep Llinás creates wide variety of different situations in which the reader can enjoy reading always enveloped in a **stimulating atmosphere**. To achieve it, the architect uses a rich range of resources. **Views to the outside** have been carefully chosen so the reader can look away. This makes resting, breathing and reading easier. In this sense, looking away complements the **staring** which reading involves.



The **natural light** that comes in is also used in a very attentive way with regard to the experience of the reader. Just as it, the **different heights of the ceilings** allow spatial differentiations which help making of every seat in the library a special place. All in all, we can notice how in Llinás' projects the intelligent use of materials is another element which gives physical, sensual and corporeal quality to the rich complexity of the areas.



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http://ca.wikipedia.org/wiki/Fitxer:BIBLIOTECA_RCR.jpg

On the contrary, the **RCR** team of architects works consciously focused on the **material aspect** of their buildings, as if they were sculptures. *“Their work is set in the landscape with a strange mixture of nurture and power, and is manifested in explicit, regular forms”* says Carlos Martí^{xiii} about his work.



In many of their work they exploit the expressive capacities of **steel** to give significance to the space, to reaffirm the **sense of place**. As they say, *“space is best expressed with the exploration of all the different registers of a single material”^{xiv}*. This is not an exception in **Biblioteca Sant Antoni – Joan Oliver**, in Barcelona (opened in 2007), where the reader can understand the space through perception of different ranges of steel: from the folded fluting of the façade to the metal steps of the main hall, and also the steps with fluted riser, shelves or many pieces of metal furniture.



The intention of the RCR architects is that the **sensorial comprehension of the space** is made through **all senses**. Visual perception takes part, but also the sense of touch through perceiving texture, weight, temperature... Although, like in the case of Biblioteca Sant Antoni – Joan Oliver, sometimes it is difficult to find balance between poetic qualities and capacity to affect of the material with its purely functional and programmatic requirements.



“Books and a dream... the building is an ordinary construction in a garden... it bears no resemblance to the institutional nature of libraries. ... these are walls that might have been here before”. This was how architect **Enric Miralles** imagined the future **Biblioteca de Palafolls**. The **EMBT** team developed this original idea until its opening, in March, 2007.



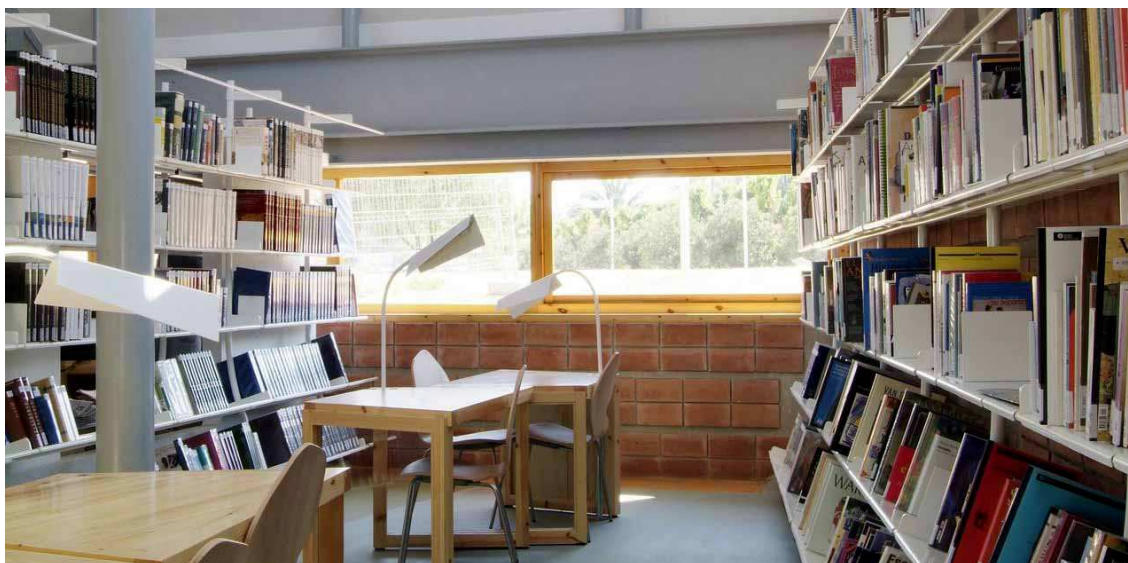
We think that Enric Miralles imagined an **almost oneiric space** for reading, where books were in suspension with the brick walls, delimiting space and accompanying the reader. **Books and bricks** as a metaphor of what the reader needs: physical protection from the bricks and the voices of all the writers come to fruition in books, to accompany

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the reader in his private journey. Books and bricks as a materialisation of what the library is.



It seems to us that this idea has been kept from the beginning of the project until the end of its construction. This is the value of the effort of the EMBT team all through these years.



“The Biblioteca de Palafolls will be provided with very special furniture. The option of personalise the furniture was a suggestion that arose from the office of Miralles & Tagliabue [...] The main contribution is that it is a single table, a concept which is harmonious with space and that gets far from the big reading tables used in other libraries” says Josep Ustrell^{xv}, EMBT architect.

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This idea was emphasised also with individual **lighting** in each table. This starts a diversity of lighting levels which as can be seen enrich with perspective the space.



In these images we can see how these ideas have come true, so the definition of this **so special space for reading** is an essential element in the **configuration of the community image** for the small village of Palafolls.

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3 Lighting



The Biblioteca **Font de la Mina**^{xvi}, in Sant Adrià del Besòs, is a work by the architect Alfons Soldevila^{xvii} and it was opened in June, 2009. It is one of the most emblematic buildings of the great urban development operation to recover the degraded area La Mina. With this we start the quick description of use of natural and artificial light in libraries.



Alfons Soldevila has focused in the study and exploration of the capacities of the **translucent and transparent materials** in different projects. In the library of La Mina



he starts from the idea of a translucent box which allows the entry of great quantity of light to the inside through the skylights on the roof and the slats all through the façades.



The **skin** of a building is defined as a complex element which allows making optimum use of natural light for reading, as can be seen in these images.



The inclination of the **slats** was studied carefully to achieve the desired effect.



In the inside an atmosphere of **lightness**, almost ethereal, is achieved through the use of these translucent materials also in furniture and the use of white as a highly reflecting colour. Reflections on the glass which the furniture includes contribute to this idea of lightness.



The **Biblioteca de Teià**^{xviii}, work of architects Sergi Godia and Berta Barrio^{xix}, was opened in June, 2009. This project shows a delicate control of natural light in a library which is half underground, bound to a park.



The exterior **lattice** of the north-east façade protects the reader from direct solar radiation.



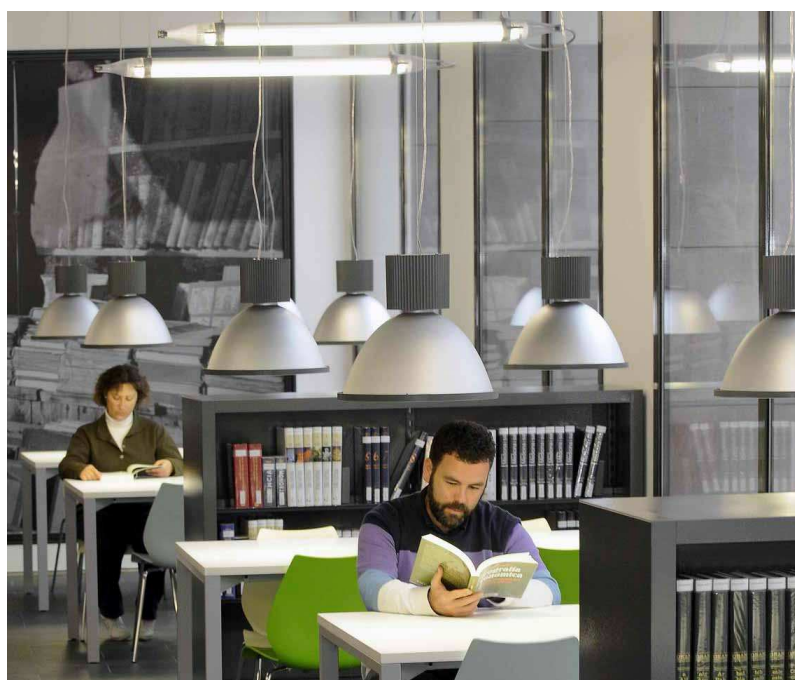
At the back side, an intelligent solution to resolve a path from the park through the roof creates a **skylight** which permits to light the most internal areas of the library and balance the level of light in different areas.



In a way it is like a cave with a fresh atmosphere, where you can take refuge and read enveloped in pleasant natural light, during the warm summer.

The interior alteration project which gave rise to the **Biblioteka Gòtic – Andreu Nin^{xx}**, in Barcelona, is a work by M1441 Arquitectura^{xxi} architects team and was opened recently, in May, 2010. This library has an exceptional location, in the Rambla de Barcelona, one of the liveliest and with the most environmental quality in Europe.

This privileged location is counteracted by the irregular and difficult geometry of the premises that had to host the library. The great work of the architects in the use of colour, materials, lighting and graphic elements permitted to overcome this initial adversity.





For the qualification and differentiation of the various areas of the library **different types of lighting** are used. Thus there are fluorescent lamps which give a general level of light and some pendular downlights above reference places which guarantee the level of light required for reading. The difference between both types of light and the fact of bringing the lamp closer to the reading surface increase the efficiency of the system and minimise electricity consumption, making the equipment more sustainable.



At the newspapers and magazines area new almost spherical lamps have been suggested. These lamps provide the area with some informality, which matches better with the relaxed reading in this area.



Finally, we would like to highlight the importance of the **graphic elements** as a part of the architectural language which allows qualifying space and providing it with meaning. In this case a brilliant suggestion was made that binds the literary output of and about the city with historical events which make the place where the library is located a place of exceptional meaning for the inhabitants of this area.

4 Conclusion

Through these projects we have seen how the architectural task of constituting areas for human activities goes beyond geometrical definition, constructive viability and acceptable comfort. The **added value** that architecture can provide makes better the library, without doubt. Its aspiration to offer the best services to the users can be emphasised through **plastic elements** which have always been the target of good architecture: use of materials, colour and the optimum use of natural light and artificial lighting. But many other factors take part, such as textures, graphic elements, acoustic conditions, indoor climate conditions, etcetera.

All in all, we think that architects who have projected these libraries have made so from the aspirations we mentioned at the beginning: to build **places** with quite **meaningful density**, which can become **referents for the community**, so that the architecture contribution through all means (including use of colour, materials and lighting) becomes an **added value** for an equipment so **meaningful for the community** such as the **library**.



So the desire that Benedetta Tagliabue expressed would probably be extendable to the wishes of each of them:

“Each user of the Biblioteca de Palafolls will keep the secret about the sensation they will experience when entering and transforming... maybe some people will not even notice it, but their brief stay will make them different”^{xix}.

ⁱ BORJA, Jordi. CASTELLS, Manuel. *Local y global. La gestión de las ciudades en la era de la información*. Madrid: Grupo Santillana Ediciones, S.A., 1997. ISBN: 84-306-0269-0

ⁱⁱ ZUMTHOR, Peter. *Pensar la arquitectura*. [Transl.: Pedro Madrigal. Photogr.: Laura Padgett] Barcelona : Editorial Gustavo Gili, SL, 2009 . ISBN 978-84-252-2327-3.

ⁱⁱⁱ Xarxa de Biblioteques Municipals. Web resource available at: <http://www.diba.cat/biblioteques/default.asp> [Last visited: 7/6/2010]

^{iv} Gerència de Serveis de Biblioteques de la Diputació de Barcelona. Web resource available at: http://www.diba.cat/directori/directori_detall.asp?id=1021 [Last visited: 7/6/2010]

^v Biblioteca Jordi Rubió i Balaguer, de Sant Boi de Llobregat. Web resource available at: <http://www.biblioteques-santboi.org/> [Last visited: 7/6/2010]

^{vi} AV62 ARQUITECTOS. Web resource available at: <http://www.av62arquitectos.com/> [Last visited: 7/6/2010]

^{vii} Biblioteca Sagrada Família, de Barcelona. Web resource available at: www.bcn.cat/bibsagradafamilia [Last visited 7/6/2010]

^{viii} Ruisánchez arquitectes. Web resource available at: <http://www.ruisanchez.net/> . [Last visited 7/6/2010]

^{ix} RUISÁNCHEZ ARQUITECTES. *Biblioteca y centro cultural Sagrada Família*. Barcelona: the author, 2007. [non-saleable edition].

^x Biblioteca del Sud, de Sabadell. Web resource available at: <http://www.diba.cat/biblioteques/agda/biblioteques/Biblioview.asp?ordre=A&Bib=7034899> [Last visited 7/6/2010]

^{xi} Biblioteca Jaume Fuster, de Barcelona. Web resource available at: www.bcn.cat/bibjaumefuster [Last visited 7/6/2010]

^{xii} SCALAE. Josep Llinàs. Web resource available at: <http://www.scalae.net/perfil/josep> [Last visited 7/6/2010]

^{xiii} MARTÍ ARÍS, Carlos. “Cristalizaciones”. In: *El Croquis*, 115-116, [III]. Madrid: El Croquis editorial, 2003. ISSN: 0212-5683

^{xiv} , Rafael. PIGEM, Carmen. VILALTA, Ramon. “Test para una examen de Arquitectura”. In: *El Croquis*, 115-116, [III]. Madrid: El Croquis editorial, 2003. ISSN: 0212-5683

^{xv} “Josep Ustrell” In: *La biblioteca pública Enric Miralles. Parc de les Esplanes, Palafolls, de Miralles Tagliabue, EMBT*. Palafolls: Edicions del Roig, 2007. DL: B-6125-2007.



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- ^{xvi} *Biblioteca Font de la Mina, de Sant Adrià del Besòs*. Web resource available at: <http://www.diba.cat/biblioteques/agda/biblioteques/Biblioview.asp?ordre=A&Bib=7034888> . [Last visited 9/6/2010]
- ^{xvii} *La Casa Translúcida - The Translucent House*. Web resource available at: <http://arquitectes.coac.net/lacasatranslucida/> . [Last visited 9/6/2010]
- ^{xviii} *Biblioteca de Teià*. Web resource available at: <http://www.diba.cat/biblioteques/agda/biblioteques/Biblioview.asp?ordre=A&Bib=7034892> . [Last visited 9/6/2010]
- ^{xix} *Berta Barrio arquitecta. Projectes d'arquitectura i paisatge - àmbit públic i privat*. Barcelona. Web resource available at: <http://www.bertabarro.com/> [Last visited 9/6/2010]
- ^{xx} *Biblioteca del Gòtic – Andreu Nin*. Web resource available at: www.bcn.cat/bibgotic [Last visited 9/6/2010]
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- ^{xxii} TAGLIABUE, Benedetta. "La biblioteca: una mirada introvertida". In: *La biblioteca pública* Enric Miralles. *Parc de les Esplanes, Palafolls, de Miralles Tagliabue, EMBT*. Palafolls: Edicions del Roig, 2007. DL: B-6125-2007.