

# Metaphor at work: a study of metaphors used by European architects when talking about their projects

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## Abstract

There is a significant amount of research in the field of metaphor, but not so much in the use of this resource by a particular socio-professional group, and very few works have included the views and opinions of the correspondent users -this paper moves one step forward in that direction. Based on a major pragmatics research on metaphors in the field of architecture aimed at the design of a course of English for students of Architecture in Spain, the following paper analyses the results of a survey to find out how English architects refer to *city* and *building* as two basic categories in their working environment. The main objective is to find out how important the use of metaphors for architects is in order to communicate ideas and concepts about their projects. The conclusions are based on an empirical study carried out in five macro-architectural practices<sup>1</sup> in London City through the use of a focused cognitive questionnaire handed out in situ. The analysis shows that unconscious and continuous use of metaphors when referring to the basic categories of *building* and *city* constitute a powerful basis for communication at work, transmitting concepts and ideas according to a common cognitive map. Finally, the importance of contextual background and its implications in the use of technical English among European architects is pointed out.

**Key Words:** metaphor, English for architects, speaking at work

## Resumen

Se ha investigado abundantemente en el campo de la metáfora, pero no tanto en el uso de este recurso por un grupo socio-profesional concreto, y muy pocos trabajos han considerado los puntos de vista y las opiniones de los correspondientes usuarios -este artículo pretende avanzar un paso más en esta dirección. Basándose en una

investigación pragmática sobre las metáforas en el campo de la arquitectura, con el objetivo de diseñar un curso de inglés para estudiantes de arquitectura españoles, este artículo analiza los resultados de una encuesta diseñada para conocer de qué forma se refieren los arquitectos ingleses a *ciudad y edificio* como dos categorías básicas en su entorno de trabajo. El principal objetivo es averiguar cuán importante es para los arquitectos el uso de metáforas para transmitir ideas y conceptos sobre sus proyectos. Las conclusiones se basan en un estudio empírico llevado a cabo en cinco macroestudios de arquitectura en la ciudad de Londres mediante un cuestionario diseñado con un enfoque cognitivo y distribuido. El análisis muestra que el uso continuo e inconsciente de metáforas cuando los arquitectos se refieren a las dos categorías básicas *ciudad y edificio*, constituye una poderosa herramienta de comunicación en su entorno de trabajo para la transmisión de ideas y conceptos dentro de un mapa cognitivo común. Para finalizar, se expone la importancia de un bagaje contextual y sus implicaciones en el uso del inglés técnico entre el colectivo de arquitectos europeos.

**Palabras Clave:** metáfora, inglés para arquitectos, conversación profesional

## Introducción

Architects seem to live in a world of their own –their working environment has been highly specialised– and they have developed their own language for the discussion of building quality. But do we know what these professionals have in mind when they refer to a *building* and a *city*? Both terms, which correspond to basic cognitive categories, are dependent on a group image built from information derived from their socio-professional group. In this sense an image can be thought of as part of the culture in which it develops. There are images that are expressed by concepts and this way of expressing the images into words is known in linguistics as metaphors.

Early research indicates that communication skills are very important for architects “meetings should be a regular part of communication between architect and client (...) where meanings are for genuine exploitation of ideas” (Symes et al., 1995: 32) and the ideas are expressed by “the language of architecture (that) is built up of signs and symbols (...) specific shape forms and textures have specific meanings” (Hellman, 1988: 182). According to my experience as a teacher in the School of Architecture in Madrid and my previous research (Úbeda, 2001), architects seem to be very good speakers: “A person who speaks poorly does not know how to use language to send people his

thoughts; and conversely, a good speaker knows how to transfer his thoughts perfectly via language” (Reddy, 1979: 287). In this paper I will show their rich and broad use of metaphors when they work with two basic categories such as city and building.

Creativity is a constant in the profession of architects. But sometimes their ideas on a particular project are not the same as their clients’ or their colleagues’, so both, client and architect, should reach early agreements on the design aspect of a project, not only through the use of drawings, but also through speech. “Works of architecture produced from verbal projections are not therefore impossible, but their outcome may be different to those produced from drawings” (Forty, 2000: 35).

In fact, metaphors become bridges of communication when architects speak to each other –they are typical of practice conversations as a vicarious exchange of meaningful experience among architects who work on the same project. As Ungerer and Schmid (1996: 120) recall, metaphor is a “*cultural model* to capture the knowledge experienced and stored for a certain field by individuals and social groups or cultures”. This strong concept can even be applied to nationalism, as a combination of social, historical, cultural, language and territory parameters, in the way Bustos (2000: 235) suggests: “Todas esas múltiples vías de identificación se plasman en formulaciones lingüísticas que expresan un mismo sistema cognitivo subyacente”. Carrell (1987) has argued that images represent only one type of cognitive experience and that cognition more frequently takes the form of schemata that exert an important influence (of which individuals might not be fully aware) on interaction with the environment. “Basically a schema is a framework on which people can *hang* information” (Walmsley and Lewis, 1993: 98). Architects, as a socio-professional group, share common and similar schemata, which for instance define the way they refer to a city and a building.

## Theoretical background

Metaphor is defined by Moliner (1998: 334) as “tropo que consiste en usar palabras con sentido distinto del que tienen propiamente, pero que guarda con éste una relación descubierta por la imaginación”. Metaphor has traditionally been related to the world of literature and poetry. But metaphor is much more than just a poetical resort: as formulated by cognitive linguistics, it is a powerful cognitive process that allows effective and efficient communication of ideas and thoughts. “Metaphor takes a range

of various forms (...) it has a surprisingly large number of functions, cognitive social affective, rhetorical and interaction-management” (Cameron and Low, 1999: 91).

Metaphor is a mechanism of analogy in which a concept that belongs to a certain conceptual domain in terms of another conceptual domain is conceived, and in which correspondences between the attributes of both domains are established; we speak about source domain and target domain, and mappings across them (Lakoff and Johnson, 1999). Thus, metaphor allows an ontological projection through the interconnection of elements that belong to both domains, and also allows an epistemological correspondence, in which the knowledge of the source domain, normally more basic and familiar, makes possible and facilitates the reasoning, the expression, or the understanding in the target domain, more abstract and complex. This action primarily takes place in reasoning, that is, at a conceptual level, and consists of image schemata coming from experiences basic to human experience (Johnson, 1987). In fact, the relationship between physical experience and thought is a key element in cognitive linguistics, as White (2001) recalls: “ (...) the physical interaction of the corporal human being with his/her environment plays a major role in empowering man to construct abstract thought” (White, 2001: 51). A graphical representation of this model with an example is shown in figure 1.

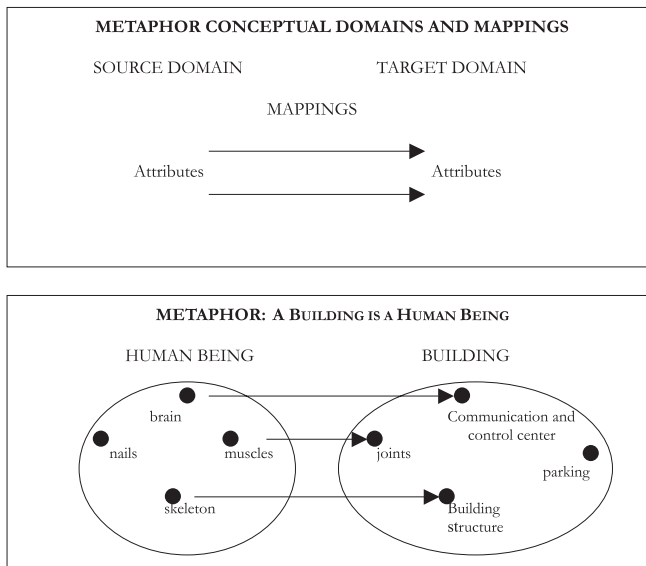


Figure 1

Forty (2000) recognises from the perspective of architecture these cognitive linguistics processes:

Successful metaphors rely on the unlikeness of things, not upon their likeness. The characteristic of an effective metaphor is it borrows an image from one schema of ideas, and applies it to another, previously unrelated schema. (Forty, 2000: 100)

A clear example is that we can make it easier to understand problems in the structure of a building if we can refer and think of them as problems that may affect a human body: fracture, stress, strain, bleeding, etc. This would mean that a personalisation, a particular case of metaphor, has occurred. Accordingly, for Johnson (1987), a metaphorical generalisation image of the type A BUILDING IS A LIVING ENTITY is to be regarded as “merely a name for the complex web of connections in our experience and understanding formed by this mapping across domains of experience” (Johnson, 1987: 7). Similarly we have statements such as PARIS IS A HUMAN BODY (Fauconnier, 1997: 147).

In addition, there is another major dimension that should be taken into account when dealing with metaphor, called by Johnson *shared understanding*, and consisting of those concepts and propositions that are shared by a linguistic community (Johnson, 1987: 206). This point basically covers social or community aspects and is also considered by Ungerer and Schmid (1996) and White (1998). In my case, since I am dealing with a specific type of professional who uses a specific type of register, these aspects become essential. Thus, Ungerer and Schmid refer to the extended use in scientific and technical language of *constitutive metaphor* as opposed to *explanatory metaphor* (Ungerer and Schmid, 1996: 149). For example, when engineers and architects speak of the *pathology* of buildings, they are using a type of language which forms a constitutive part within structural theory and that has become conventional and accepted among experts in the field to discuss a certain type of problem. Seemingly, they are not using the analogy just for explanatory purposes. On the contrary, it makes up part of their way of communication when dealing with engineering problems and when trying to solve them. To round off the same idea, here is what White says about it:

Intimacy can be enjoyed by all those who are confident that what they say will be understood. It is the bond between those who share not only a basic linguistic competence but a common stock of experiences, interests and sensibilities and the ability to call upon that information when interpreting language. (White, 1998: 56)

## Data gathering

The information presented in this paper is part of a larger project, which deals with a cognitive approach in the design of a course of English for architects at the School of Architecture in Madrid, Spain. This paper is based upon the in situ linguistic data gathered through questionnaires submitted at architectural practices in London where English is the working language. As a non-native teacher of English, visiting a few macro-architectural practices with European and worldwide projection, this was a challenge.

In order to find out how English speaking architects refer to *city* and *building* in their professional conversation, the questionnaire I used (see appendix) had a main purpose of finding out the different ideas and images that architects have about a city and a building, and that are embedded in terms when they speak at work. Another purpose was to identify *cognitive* models of abstract phenomena which are indeed grounded in basic experiences (Ungerer and Schmid, 1996).

The total number of questionnaires handed out in situ at their practices was 150, but only 62 architects kindly returned them. All the questionnaires were answered in English. Obtaining more questionnaires faced two basic constraints: acceptance to be received in such big practices, and the normal workload of architects. Nevertheless, the gathered information provides a good symbolic cognitive model of these professionals' use of metaphor when they work on their projects.

## Results of the questionnaire

The material obtained from the questionnaires shows how crucial the role of metaphor is in the process of the language when an architect speaks about a city and a building. The particular target domains of the metaphors, how they operate and what they have to tell us about the cognitive use of metaphor, in the case of a city and a building, will now be the focus of our attention.

The analysis of the results of the questionnaire not only confirmed the importance of the use of metaphor in the working environment, but provided additional information, such as:

- the concept that architects have of *city* and *building*

- the conscious or unconscious use of metaphors at work
- the kind of speaker with whom architects use metaphors

In figure 2, we can appreciate the broad range of views and building used by European architects when talking about their projects. The data were collected from the completed questionnaires. The results have been divided into three categories: Living Organisms, Objects and Miscellaneous. If the number of appearances of a metaphorical image over the total of questionnaires is equal to or greater than 10%, the overall percentage is shown between brackets.

(Question 2.1.) What is your image of a city?	(Question 2.2.) What is your image of a building?
<p>a living organism (26%)                      a large tree (20%)                      a jungle (18%)                      a self-organism system                      a super organism                      a life form                      a body                      a heart, veins, lungs, intestines                      tentacles                      smelly and alive                      a coral                      a rat race</p>	<p>an animal (30%)                      a body</p>

**As Living Organisms**

Figure 2: The images of 'city' and 'building'

The two major images of a building are the conceptual metaphors THE BUILDING IS A BODY<sup>1</sup> and THE BUILDING IS AN ANIMAL. Regarding the term city, the most frequent ones are THE CITY IS A LIVING ORGANISM and THE CITY IS A TREE. In general I find complex combinations of metonymy with different metaphors, something which frequently occurs in natural language. The evidence strongly suggests that cognitive models of abstract phenomena are indeed grounded in basic experiences and therefore are essential part of the experiential view of language.

Other images were gathered through more directed questions constrained to the perception as living organisms. Figure 2 shows the results.

<b>(Question 2.4)</b> Can you remember and write down one or more specific living organism you use when you refer to a city?	<b>(Question 3.4)</b> Can you remember and write down one or more specific living organism you use when you refer to a building?
City's core Organic way Blood circulation system Heart Core articulation	Heart Veins Intestines Pod Cells Animal Fish Horseshoe Tree Person Crab Worm Bird Snake Mollusc Crustacean Finger blocks Butterfly roofs Aqueous body Flower arrangement Envelope skin membrane

Figure 3: Specific living organisms to refer to 'city' and 'building'

City and building provide a set of metaphors as conceptual phenomena which structure the architects' way of thinking through the language they use when working. In fact, as Ungerer and Schmid (1996: 119) conclude, "the metaphors that have unconsciously been built into the language by long-established conventions are the most important ones."

The overall picture of a city and a building for an architect is that both are living entities because both are part of people's life and any life is alive. Thus, BUILDING IS LIFE and CITY IS LIFE.



In figure 4 it is shown in what situations and with what speakers architects do use metaphors at work.

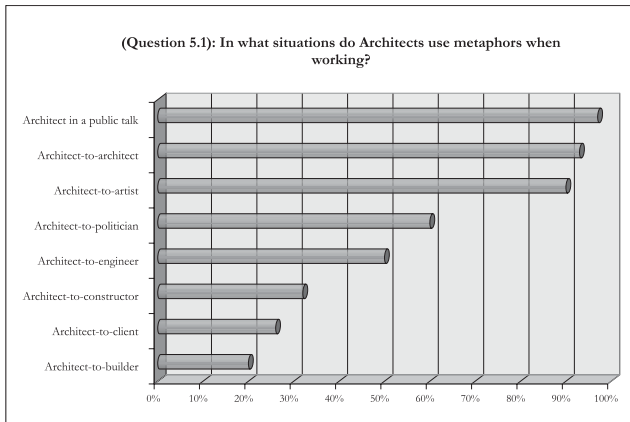


Figure 4: Situations in which architects use metaphors

The most common situation identified “Architect in a public talk” has probably a lot to do with the rhetorical use of metaphor to build up an understandable, rich and punchy message to the general public, showing off at the same time the capability of the architect in the mastering of language. The objective is to communicate, to adapt technical concepts to more manageable concepts (target domain) and to get the message through, to make it understandable. In this sense, the metaphor provides structural support to the thought processes, as White describes:

(...) when we struggle with abstract ideas such as emotion concepts, argumentation or different scientific disciplines, we call upon our knowledge of concrete domains to profile and give conceptually manageable structure to the former. At the same time, as we use the structure, we can use the whole supply of wordstock and expressions associated with that structure. We select these in accordance with the nuances of our ideas at any particular moment. (White, 2001: 50)

The second situation, “Architect to architect”, is really the most common at work. Metaphor is a powerful tool to communicate ideas, concepts and nuances to colleagues based on a similar or common shared cognitive map. In this case, getting the message through is a secondary objective of the use of metaphor; the main one is efficiency in communication, by taking advantage of shared experience and cognitive maps.

The third situation, “Architect to artists”, also deserves some attention because it reflects the confidence of the architect in the fact that an artist shares the ability to understand the meaning conveyed by a metaphor; i.e. architects also *belong* to a world of images and poetry, and thus share a similar cognitive map that allows them to develop an extensive use of metaphors when communicating.

The rest of situations are less common and architects either do not rely on the ability to be understood by their counterparts in the communication, or they prefer not to use them to avoid future misunderstandings (e.g. with a client). In fact, use of metaphors with clients is risky in the sense that a suggestion, or a proposed modification to the original specification, cannot be clearly understood by the customer and may finally cause the customer’s dissatisfaction. Other situations can trigger rejection by the customer if the used metaphor brings up to his/her mind other concepts (based on the personal experience) that are negative or opposed to the concept that is being transmitted. This can ruin the project or the commercial relationship.

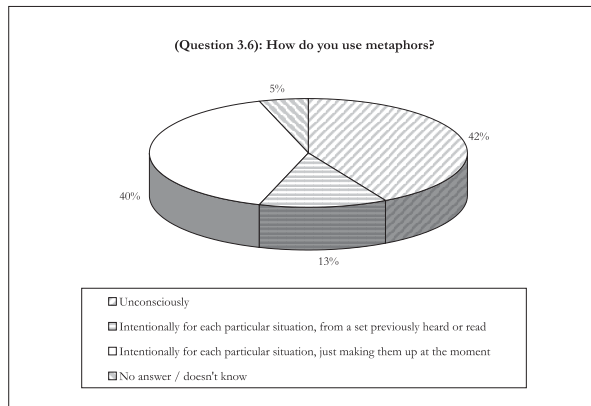


Figure 5: Conscious and unconscious use of metaphors by architects.

Figure 5 shows the degree of consciousness in the use of metaphors, which is a 53% in total and shows also that architects recognise metaphors as a tool for transmitting ideas. On the other hand, it is also relevant that 42% of the architects use metaphors without intentionally digging into their background or in their imagination; metaphors just come up as a natural part of their communication. When they are forced to think about the concept of metaphor, and are asked in what situations they use them, they realise that they use them very often and can identify the situations (figure 4). In other

words, this 42% of architects use them unconsciously as part of their day-to-day language (figure 5), but they become aware of their use when they are asked about it.

Another interesting result of the questionnaire is that when architects were asked about the percentage of use of city or building metaphors as being living organisms, the average percentage of ticked answers was 40-60%. Probably, most architects share the view of the following statement, which was written in the last section of the questionnaire by one of them: “*A building holds human life, therefore when it is inhabited it becomes a living organism. If it is possible to bring to life a building in descriptions of it, one would not like to describe their [the architects'] buildings as dead architecture*”. The level of involvement of architects into their work is probably the reason why they tend to think of a city and a building as living entities that require care, giving an emotional dimension to their profession.

It is quite clear how recourse to metaphor by architects when they deal with their ideas is not only widespread among the profession but also constitutes a systematic tool to make themselves understandable by their colleagues and clients. The questionnaire, through one of its questions, reflected that 65% of the architects thought that people understand them much better if they use metaphors when keeping a conversation at work than if they do not. As cognitive linguistics research has been showing, the use of metaphor is well-height unavoidable (Lakoff and Turner, 1989) and serves a whole range of other functions in conversation (Glucksberg, 1989) among which the understanding of an idea stands out.

## Conclusions

As it has been shown, the use of metaphors among architects is widespread and constitutes a powerful way to communicate. They have developed an efficient way of communication when they speak to each other; in fact most of the time they naturally and unconsciously produce metaphors. When they talk in public they also tend to use them often; it is a way of brightening and enriching their talk. However, the use of metaphor is reduced when they try to communicate with engineers or customers in order to avoid misunderstandings.

City and building are two basic linguistic categories in the world of architects, and the number of metaphors, as category extensions, has been proved to be wide and rich; the *living organism* is the most frequently used, both with global and partial metaphors that refer just to parts of them.

The pedagogical implications of the findings presented in this paper can be envisioned: if we try to set up an English class for students of architecture in which an activity based on metaphors is designed, this activity will naturally fit within their cognitive structure and maps, thus increasing motivation, allowing retention of vocabulary, and making easy to practice and to learn. Development of this idea constitutes the basis of further research.

More research could be developed also by carrying out a contrastive study of the use of metaphors by other socio-professional groups such as engineers, as well as by other architects as speakers of other languages. Results of this research would for sure span the conclusions of this paper.

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1 By macro-practice I refer to those practices with more than 200 architect employees.

2 For the representation of metaphors small capitals have been adopted throughout the paper.

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## Appendix: Questionnaire

DEPARTMENT OF APPLIED LINGUISTICS:  
SCHOOL OF ARCHITECTURE,  
POLYTECHNIC UNIVERSITY OF MADRID

The following questionnaire is part of a PhD work, and its results will be considered for the design of an English course for students of architecture in the School of Architecture in the Polytechnic University of Madrid, Spain. The objective of this questionnaire is to obtain information on the use you make of metaphors in working situations; I am specially interested in categories such as a city and a building. Please try to answer each question, by ticking, filling in the blanks, or answering as needed.

Thank you very much for your help!

0. What is today's date? \_\_\_\_\_

### 1. Personal Profile

- 1.1. Are you an architect?  Yes  No  
 1.2. Are you an engineer?  Yes  No Speciality: \_\_\_\_\_  
 1.3. How many years have you been working as such? \_\_\_\_\_  
 1.4. What is your gender?  Male  Female  
 1.5. What is your age? \_\_\_\_\_

### 2. THE CITY

- 2.1. What is your image of a **city**? Please write down some expressions.  
 2.2. When you talk about a **city** at work, do you ever refer to it as a living organism?  
 Yes  No  
 2.2.1. If your answer is **no**: how do you refer to it ?  
 2.3. In which sense do you use it? In a negative or positive way?  
 2.4. Can you remember and write down one or more of such specific living organisms you use?  
 2.5. Do you think people understand you better by using such analogies?  Yes  No  
 2.6. How do you use the expressions?  
 unconsciously  
 intentionally for each particular situation, from a set you have previously heard or read  
 intentionally for each particular situation, just inventing them at the moment  
 2.7. Please tick the percentage of use (# of times you refer to the CITY as a living organism over # of times you refer to the CITY):  
 0%-10%  10%-20%  20%-40%  40%-60%  60%-80%  80%-100%

### 3. THE BUILDING

- 3.1. What is your image a **building**? Please write down some expressions.  
 3.2. When you talk about a **building** at work, do you ever refer to it as a living organism?  
 Yes  No  
 3.2.1. If your answer is **no**: how do you refer to it ?  
 3.3. In which sense do you use it? In a negative or positive way?  
 3.4. Can you remember and write down one or more of such specific living organisms you use?

- 3.5. Do you think people understand you better by using such analogies?  Yes  No
- 3.6. How do you use the expressions?
- unconsciously
  - intentionally for each particular situation, from a set you have previously heard or read
  - intentionally for each particular situation, just inventing them at the moment
- 3.7. Please tick the percentage of use (# of times you refer to the BUILDING as a living organism over # of times you refer to the BUILDING):
- 0%-10%     10%-20%     20%-40%     40%-60%     60%-80%     80%-100%

#### 4. OTHER ANALOGIES

- 4.1. Apart from the previous analogies mentioned, can you think of other analogies you make in other areas of your work or from everyday language? Please name a few of them:

#### 5. THE SPEAKERS

- 5.1. Please grade the frequency of usage of metaphorical expressions depending on the people who are involved in the communication:

- (1: very seldom.....5:very often)
- |  |  |
|--|--|
| a) When a client speaks to an architect:                             | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| b) When an architect speaks to a client:                             | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| c) When an architect speaks to an employee:                          | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| d) When an architect speaks to an architect:<br>Others. Name please: | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| e) _____   | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| f) _____   | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| g) _____   | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |
| h) _____   | <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 |

#### 6. USE OF METAPHOR IN ARCHITECTURAL PRACTICES

- 6.1. What does the use of metaphor imply, convey, impress, or/and bring in, in your profession?
- If you need some help for filling out this questionnaire, you can get in contact with Mrs. Úbeda in the telephone number or email address provided below. Please, when the questionnaire will be completed, send it back as soon as possible by fax, mail or email to the following address:

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**THANK YOU VERY MUCH FOR YOUR COOPERATION!!**