Let us begin with a basic and simple overview. To realise a built project, three parties usually need to be involved: the project owner, designer and builder. They may be fully independent from each other, or may overlap and interconnect significantly. These parties may come together to create simple structures, or highly complex ones involving a large number of players representing multiple skill sets that require sophisticated levels of coordination.

At one end of the spectrum, a project may consist of a simple structure such as a small residence. Its owner is often an individual who hires a builder to both provide its design and to construct it. The builder would construct the project with the aid of a small construction crew.

At the other end of the spectrum are large-scale projects such as a multi-use development of an urban district, an airport or a shopping centre. One party may come up with the idea and another may secure the funding for it. Teams of professionals, including architects and engineers, as well as legal, environmental and real-estate development specialists, among others, would be involved in determining its design. A large and diverse set of construction teams would be responsible for building it.

These simple – and possibly simplistic – preliminary comments have come to apply to the building process all over the world, in both emerging and advanced economies, though with varying levels of sophistication. The increased globalisation that has affected the financing, design and construction of building projects over the past two decades, however, is having a homogenising impact on how such projects are being conceived and implemented everywhere.

A major problem that primarily affects built projects in the developing world, however, is that this general arrangement through which such projects are realised is fully disbanded the moment the project is completed, and the project is more or less left on its own after that. Maintenance and upkeep are barely provided. Additions and modifications – and these will inevitably take place – are made to the project in a haphazard manner and without any involvement from the original design team. All this will inevitably negatively impact the project’s formal composition, its functional performance and even its structural integrity. These projects literally may, and often do, eventually fall apart.
What I am describing here is not a hypothetical scenario, but one that I have come across again and again. I am continuously confounded by how the extensive human and material resources dedicated to building projects are simply left to go to waste. It is one of many aspects of the intricate subject of sustainability that are very often unaddressed in the making of built projects in the developing world. As a result of this, I have come to see the value of the motto “if you can’t maintain it, don’t build it”, and there are many projects I have come across that would have been better left un-built.  

The responsibility for ensuring the upkeep and maintenance of a built project falls almost completely on its owner, rather than the designer or builder. Even the best-designed and best-built projects need continuous maintenance and upkeep, and the field of facilities management, which is a well-established one in developed economies, is a response to this need. The field unfortunately does not even exist in many developing economies.

Still, it is interesting to note that so many projects everywhere are photographed for architectural publications very soon after they are completed and before they are subjected to any meaningful use. It is as if the architectural community views a project as being at its best at the moment of completion, and considers its trajectory from there to be only a downhill one. The Aga Khan Award for Architecture is unique in this context in that it acknowledges this challenge and therefore requires that projects nominated for the Award have been completed in the past six years and in use for one year. I would argue that even this period is not enough, and that a longer one is needed. In fact, an interesting exercise would be to revisit all the projects that have received the Award since its inception and until about 10 years ago (that is, the 2004 Award cycle) to see how they have fared. How a built project has fared over the years is definitely no less important than how it looked upon completion.

This brings me to the role of the architect, not only in a project’s conception and implementation, but also in its post-occupancy phase. The architect’s role, of course, has always been subservient to that of the building owner, who, after all, controls the monetary resources needed for constructing a project. This, of course, is not surprising. Even architects who have achieved a level of stardom still only have relatively limited decision-making authority in the design and construction of a project. This limited role diminishes, if not completely disappears (depending on context), after the project is completed.

More recently, the architect’s role as the project’s designer and form-maker, and even overall coordinator, seems to be seriously challenged as a result of the increased participation of a variety of new technical specialists connected to the making of built projects, which are becoming increasingly complex as design and construction projects. These include not only traditional specialists such as those involved in structures and HVAC (heating, ventilation and air conditioning), but also a wide range of newly emerging specialists in fields that address issues such as security, environmental sustainability, space utilisation, legal concerns and financial investment requirements. In this newly emerging setting, the architect is often only one of a sizeable number of players with influence on the form-making process, and very well may be marginalised to become – at best – the project’s “image maker”.

And, of course, we should not forget that a significant part of our built environment is created without the participation of architects. This does not only apply to poorer economies, but also to advanced and affluent ones. In the United States, for example, there is no need to involve an architect in residential or other building types that do not exceed a specific size. Here, the role of the architect is often taken over by the builder. In case an architect is engaged for such projects, it is most often simply because an owner wishes to make a statement about his/her elevated socio-economic status.

This exclusion of the architect from the making of built projects of course is even more prevalent in poorer economies. Here, let me provide an anecdotal example. I recently had an interesting conversation with an architect who had been studying the design and construction practices affecting residential buildings in a rural area in northern Jordan. She commented that the architect is almost always completely absent from these practices. The owner and contractor do not feel there is any need to involve an architect, and they believe that whatever an architect can do, they can do just as well. She added that the results of excluding the architect from the design process are disastrous. Admittedly, had people continued to build using the traditional materials and construction methods, as well as design and planning features that had been handed down from generation to generation and that had been fine-tuned over the years, one would have been able to easily make do without an architect. In such a case, many of the needed skill sets for these projects that the architect would have brought in already would have been mastered by the master builder. These traditional approaches towards building, however, have disappeared. A main reason for this is that they are no longer economical. It is far cheaper today to build using materials and components including cinder blocks, reinforced concrete, cement plastering, aluminium-frame windows… instead of load-bearing stone. This is the case even though many traditional building systems result in structures that last longer, have better thermal insulation capabilities, and are of a higher aesthetic value.

Since traditional construction approaches have been abandoned, and adequate widely spread comparable ones have yet to be developed, the state of building within the context of a place such as rural Jordan is characterised by utter confusion and incompetence. The plans for the residences do not work well at all. One ends up with rooms that are difficult to access or that do not receive any natural light or ventilation. One would also come across strange
arrangements where a bathroom may only be accessed via the kitchen (as a poorly conceived way to save costs by limiting the length of the plumbing network), with only a curtain separating the two. Rooms unintentionally end up having different floor levels. An architect with very basic design capacities (not all architects admittedly may be described as such) should be able to ensure that such problems are avoided and that a residential plan would function with an acceptable level of practicality and efficiency. Most building owners and builders in such contexts, however, fully believe that the architect does not have any skills that they do not themselves have. If they believe that the architect has a skill that others do not possess, it would be to “make a building look more beautiful” and, for many, beauty is an unnecessary luxury they do not care about and feel they cannot afford. In the meantime, although significant resources are dedicated for making a building, these resources are used in a most inefficient and wasteful manner. Therefore, even though a house for many is their most valuable asset, this asset is dysfunctional on numerous levels.

The training of architects today, although in need of an overhaul, still provides them with diverse skills and considerable intellectual and technical versatility that can aid them in addressing the various challenges facing the built environment. Architects theoretically are still capable of playing a somewhat central role in the making – and also the managing – of built projects.

There are two issues I can think of that have prevented architects from doing so in an effective manner. The first is that architects historically have cornered themselves into serving only clients with deep pockets, whether individuals or institutions, and thus have limited their potential clientele. On a certain level, this is somewhat understandable. The act of building is an expensive undertaking, and it is carried out by those who are able to dedicate considerable financial resources to it. I find this relation between architecture and wealth intriguing. For example, it is worth noting how a number of visionary architects such as Mies van der Rohe and Le Corbusier, or Hassan Fathy, who dedicated considerable energies to developing inexpensive mass-produced housing prototypes during the 1920s, ended up abandoning those attempts, and instead switched to designing for wealthy clients, who view architects primarily as form-makers. They also need to redefine their role away from primarily creating or reshaping built form. Their role needs to be reconfigured to include managing built form and also innovatively resolving the challenges that inevitably emerge as buildings need to adapt to continuously changing and evolving uses brought about by demographic, social, economic and technological developments. Not every intervention that architects make in the built environment needs to involve creating new forms or reshaping existing ones, both of which are expensive and heavy-handed activities that involve destruction and construction.

A very inspiring example of such a rethinking of the role of the architect is presented by British architect Alastair Parvin, the co-founder of WikiHouse. In a recent TED talk, he presents new frontiers that architects may explore and that allow the profession to serve very wide segments of society rather than the fortunate few who have the financial means to hire architects.

Parvin points out the example of the school that approached an architectural office to completely reconfigure the interior of the school building because the corridors are too small for the number of students enrolled there. The corridors therefore could not handle the students who need to go through them at the beginning and end of the school day and during recesses. This led to all sorts of problems relating to congestion and bullying. The school understood that this project would cost a few million pounds. Architectural firms generally would welcome such a commission. This architectural office, however, came back to the school with the recommendation that they leave the building as it is and, instead, use staggered schedules for the students. They therefore came up with a solution that would cost a few hundred pounds (for installing new school bells) rather than a few million. Parvin adds that one would think that this office is driving itself out of business by making such recommendations. What it is doing, however, is to rethink the role of the architect in a manner that is not limited to the conventional role.

A second factor that I feel has prevented architects from being able to take a central role in the making of built projects is very much a self imposed one. Architects have restricted their role by faithfully subscribing to the romantic view of the architect as artist and form-maker. This is propagated in schools of architecture, where architects are conditioned to believe that professional success is most powerfully expressed when designing award-winning projects that are celebrated for their formal qualities. Interestingly enough, Hollywood has also contributed to propagating this romantic view of the architect to the public, sometimes giving it heroic dimensions, since the making of The Fountainhead in 1949.

Form-making is definitely an integral part of what architects do. Architects, however, need to expand and even redefine their role so as to ensure a meaningful degree of relevance in today’s ever-changing world. In order to achieve this, architects, for one thing, need to free themselves from working exclusively for wealthy clients, who view architects primarily as form-makers. They also need to redefine their role away from primarily creating or reshaping built form. Their role needs to be reconfigured to include managing built form and also innovatively resolving the challenges that inevitably emerge as buildings need to adapt to continuously changing and evolving uses brought about by demographic, social, economic and technological developments. Not every intervention that architects make in the built environment needs to involve creating new forms or reshaping existing ones, both of which are expensive and heavy-handed activities that involve destruction and construction.
of constructing (and possibly tearing down) a structure, but that innovatively re-imagines how a structure may be used. This allows them to become relevant and valuable to a much wider segment of the population.

Parvin also presents WikiHouse (www.wikihouse.cc). Here, he has been involved in developing what he refers to as an open-source construction system for building a single-family house. WikiHouse is basically a big kit that is available online. Users can download a set of cutting files and physically produce pieces using computer-controlled cutting machines. They would then assemble these pieces together to create the skeleton of a house. Two to three people with no experience in construction can easily assemble the basic chassis of such a house. Parvin refers to this process as one that allows societies to move from a state of mass consumption to one of mass production, and that allows everybody to become actively involved in the making of the built environment. It also allows the architect to take on the role of social and economic enabler through designing such kits and making what architects do accessible to a wide segment of society.

The Award Juries have shortlisted and awarded a number of non-conventional building projects over the years. Examples have included the Sandbag Shelters in Ahwaz, Iran, by Nadir Khalili and the Post-Tsunami Housing project that Shigeru Ban Architects developed in Kirinda, Sri Lanka. Both provide innovative solutions regarding how housing may be designed and constructed. Such solutions, however, remain few and far between. Additional solutions need to be developed. It seems we are still a long way from getting there.

What I have presented in this essay provides a very preliminary exploration of how architects may take part in redefining how built projects are designed and constructed, and how in doing so they may contribute to the process of democratising the process of making architecture while maintaining an important role in it. Such a goal remains in its infancy, but considerable advances can be made towards realising it. Architecture can and should be made more affordable and more participatory. Moreover, the skill sets that architects usually master can be made relevant to a much wider segment of the population rather than only to a privileged few. New technologies, new needs and new mindsets can bring about a revolution in how and by whom buildings are designed and made, and can completely reconfigure our conception of the built project.