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A cross-cultural study of architectural production in Korea and the West: cultural transfer within South Korean architecture and urbanism, 1990-2010.

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A CROSS-CULTURAL STUDY OF ARCHITECTURAL

PRODUCTION IN KOREA AND THE WEST:

Cultural transfer within South Korean architecture and urbanism,

1990-2010

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A CROSS-CULTURAL STUDY OF ARCHITECTURAL PRODUCTION IN KOREA AND THE WEST:

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Abstract

This thesis examines the issue of cultural transfer within the context of modern Korean architecture and urbanism from 1990 to 2010 in light of globalising forces. My research is based on the proposition that the emergence of any new architecture in South Korea cannot be simply categorized according to the terms familiar in predominant western architectural theories and practices. To demonstrate this point, it investigates a range of contemporary Korean cultural conditions: hyper-digitisation of everyday life, prevalence of crowd-sourced popular culture, and a 'bang' entertainment room phenomenon for the collective enjoyment of leisure in dense urban sites.

As a result, the thesis challenges the usual notion of a balanced exchange between the 'foreign' and the 'local' within the processes of globalisation, thereby disputing the idea of an easy mutual influence between different cultures. Instead, my study aims to build a critical method which can respond to complex issues of the transfer of cultural aspects, in regard not only to socio-political conditions but also to those of linguistic and cultural diversity. I also present through some outline design explorations a new framework through which to think about architectural and urban design in South Korea, and thus for understanding its appropriation within a broader, globalising cultural context.

A key argument in my research is that just as increasing levels of economic, business, cultural and communication exchanges are now being developed between the two parts of Korea, so too large-scale architectural projects are required to create continuous urban projects predicated on innovative 'themed' socio-economic environments. This PhD study hence proposes a new mode of architectural and urban production that carries significance both as an experimental approach in general, and also one that can serve to guide future developments following the (hopeful) future reunification between North and South Korea.

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Author's declaration

I declare that all the material contained in this thesis is my own work.

Introduction

The underlying subject of this thesis is the effects on architecture and urbanism in South Korea as the result of increased cultural exchanges due to globalisation, looking especially at cross-cultural architectural influences between western nations and South Korea. My research seeks above all to introduce a new framework of values and perspectives around the subject of cultural transfer, revealing the characteristics which arise out of the hybridisation of binary elements. These include traditional Korean elements contrasted with those originating from the west, colonial versus post-colonial values, modernism versus post-modernism, and acceptance versus resistance during the process of globalisation that has been happening over the past few decades. This is a study of the almost contemporary, but just recent past, in that the dates for my thesis research (and hence the data and statistics presented) are the period from 1990-2010. This doctoral project will hence examine and present the issue of cultural transfer within the context of modern architecture and urbanism in South Korea, a country where modernity has only really developed over a very short period since its inception in the 1960s. Until it was hit by the widespread Asian financial crisis in 1997, South Korea had been a nation that was relentless in its economic goals, driven by quality, and almost totally automated – i.e. the paradigm of a modernism-producing country. Since then however its problems and issues have become much more complicated, especially in terms of the anticipated reunification with North Korea, something

that may well happen in the not-too-distant future and which would create enormous socio-economic and cultural changes – as such, this possibility of reunification is a theme which underlies this study. A key question also to raise within this thesis is whether architecture has a central role to play in expressing cultural identity in countries like Korea, or whether that is not the case.

A number of interesting ideas within the realm of cultural production have arisen out of this process of rapid implantation of capitalist growth in South Korea since the 1960s. A developing country like South Korea clearly needs to import new ideas and cultural influences, but yet these imports are not always directly applicable – and hence this compels people in places like South Korea to create new hybrid indigenous versions from out of these imported ideas and influences. My research here is based on the proposition that the emergence of any new Korean architecture and urbanism cannot be simply categorized according to the terms which are familiar in predominant western architectural theories and practices. My thesis instead aims to build a critical method which can respond to the complex issues resulting from the transfer of cultural aspects, in regard not only to socio-political issues but also to those of linguistic and cultural diversity. Nor is it something we can just stand by and let happen, since it already affects all South Koreans in their everyday lives. This PhD study will hence also seek to generate a new methodology of architectural production that will carry significance – both as an experimental approach to the subject in general, and also one that might help to guide future developments following the expected reunification between South and North Korea. A crucial argument

in my research is that just as increasing exchanges in economics, business, communications and cultural activities are now being developed between the two parts of Korea, so too it is the case that larger architectural and urban projects are going to be required to create continuous urban projects to link the two parts of the divided nation back together – and that these projects will have to be predicated on innovative socio-economic environments. New forms of urbanism will therefore be needed for the new unified Korea. Here perhaps the best known precedent is Heyri art village, which lies in the rural region just to the north of Seoul, and which functions as an economic and cultural engine in itself. Thus the fundamental challenge of this doctoral thesis is to provide new conceptual and systematic possibilities for the composition of architectural space, form and structure within a reunified Korea, and for this purpose a site – in effect an exemplary test case – has been chosen close to the current demilitarized zone along the border with North Korea as the area for investigation in the final chapter.

Another striking point in recent years is that South Korea has become an important locus and indeed marketplace within the global architectural community – something that could not have been predicted with any certainty just two decades ago. Now it is frequently found that large Korean firms are trying to cooperate with overseas architects or architectural practice of high ability and reputational fame in order to become more competitive in winning commissions.[1] Of course, there have also been some cases in which the client

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[1] The international firms engaged in major high-profile projects in South Korea include: Dongdaemun Design Park & Plaza (Zaha Hadid), Lotte World Tower (KPF), Busan Cinema

has nominated overseas architects right from the beginning, or else insisted upon an international architectural competition in which cooperation with overseas architectural practices are the prerequisite for an entry. Those now active in the South Korean architectural and urban scene include Zaha Hadid, Coop Himmelb(l)au, Richard Rogers, Nicholas Grimshaw, Terry Farrell, Rafael Vignoly and Mario Botta. And, as globalisation progresses, the architectural market in South Korea learns that it needs to import new ideas about how to deal with emerging urban conditions, and this too leads to the expectation of bringing in high-tech skills from foreign firms. For many observers, the history of this pattern of cooperation with overseas firms has now fostered a situation where there a foreign dependency in South Korean architectural culture. After the USOM Building in Seoul (1961) was constructed to the designs of US-based King Architects Association, this overseas cooperation tended to be mainly with Japanese architectural firms and centred on hotels and commercial buildings in the 1970s. In the 1980s, likewise, most of the new hotels and offices in South Korea were designed through collaboration with overseas firms, but now the cooperation pattern gradually shifted from being that with Japanese firms, which in general displayed similar belief systems and patterns in architectural culture, to a reliance on the input from American practices. As one entered the 1990s, there was then a huge rush by US multinational architectural firms into Korea, especially in the production of high-rise office buildings which began ever more to determine the skyline of the urban centres. Building types built by overseas architects also expanded to include various projects such as new metropolitan

Center (Coop Himmelb(l)au), World Business Center Solomon Tower (Asymptote).

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airport for Seoul, KTX train stations, university blocks, research facilities, mixed-use buildings which incorporated residential and commercial purposes, etc.[2]

Almost as a reaction to this explosion of US dominance in the 1990s, ever since 2000 a different condition can be observed in terms of the range and nature of design cooperation with non-Korean architects. If in the past it has seemed always that the overseas firms would hold the initiative in terms of the project, thereby taking change of the schematic design process and the early stage of design development – with local South Korean companies then participating in the later design development phases and in producing the construction documents – now the kind of work being done by local firms has expanded greatly, such that they are now more actively participating at the very early design stages. This can be seen as applying to the recent development scheme for the South-East Shopping Centre in Seoul as well as in other big 'turn-key' projects in the last few years. Having said this, however, the majority of these major projects have still depended upon the schematic designs and management planning provided by overseas firms. And although the dependency on non-Korean practices is undoubtedly getting weaker and weaker, many Korean firms are being expected to purchase or copy an idea from overseas practices and use these as a sort of temporary makeshift design to secure the commission, rather than investigating these cross-cultural ideas more in terms of proper technology transfer or the acquisition of necessary

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[2] The firms include Ellerbe Becket, Perkins & Will, KPF, RTKL, HOK, SOM, Rafael Vignoly, ADP, Burns & Donnel, DMJM, KMD, Callison, and also increased the participation of European architects such as Richard Rogers, Nicholas Grimshaw, Terry Farrell, Mario Botta, etc.

know-how. Two Korean architects, Park Jin-hee and Hong John, have raised a familiar criticism of the conditions in which they have to work as a consequence of foreign architects being brought in to design in South Korea:

> Unfortunately, giving the big projects to foreign firms and relegating Korean architects to adjusting foreign designs to laws/regulations does not enable them to fully express their creative potential. Chances of landing a big contract should be given to local offices as well, especially in culturally significant projects like the Yongsan International Business District (YIBD) project.[3] A radical, Korean-only, approach might not be the ideal solution as well, but a fairness in project distribution would be an appreciated effort and would bring about diversity in the built environment.[4]

On the converse side, this condition is also reflected in a more mature approach to contemporary architecture and urbanism in the last decade, which is significant as South Korea had been notably lagging behind more internationally famous architectural nations in the Far East like Japan and now China. It can be seen as part of a maturing of cultural production in general through the reactions in favour of and also against globalisation, which has had striking effects. South Korea, for instance, has also now become an important cultural

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[3] The Yongsan International Business District (YIBD) project has become very controversial because no Korean architectural firms are engaged. Location: Yongsan in the centre of Seoul, scale is 500,000m². Master-plan architect: Daniel Libeskind. Nineteen foreign star firms (MVRDE, BIG, SOM, Asymptote, and KPF, REX) have been chosen. Lee Kyung-taek. 'Yongsan International Business District, with no Signpost for Development', *Space*, no.531 (Feb 2012) pp 20-23.
[4] Jin-hee Park and Hong John, Convergent Flux: Contemporary architecture and urbanism in Korea. (Basel: Birkhauser, 2012) p 35.

producer in the fields of cinematic films and pop music. *Hallyu*, commonly

known as the 'Korean Wave', has emerged as a new umbrella under which a

range of artists, filmmakers, musicians, etc have been grouped together. When

talking about the impact of the Korean New Wave cultural products, it is notable

that this has led to creation of demand for tourism to South Korea from

countries such as China and Japan; this is a theme that will appear in the study,

and in fact is part of the government's economic strategy. The 'Korean Wave'

has indeed spread rapidly from far-east Asia to encompass the Americas,

Europe, Africa, and the Middle East, largely due to the advantages of

information technology communication outlets such as YouTube, MP3 players,

and the internet. Indeed, as this thesis will show, South Korea emerged as the

probably the world leader in terms of creating information flows and new cultural

products due to the rapid expansion of its pattern of consumerist culture and its

incredibly advanced IT industry.[5] South Korea can hence legitimately claim to

be the most highly digitised country in the world. And it has become so by

following its own process of development, rather than simply succumbing – as

other nations have done – to the pressures of American digital provision. To

give a vivid example of this, the Apple iPod player, as a key portable symbol of

globalisation, is not at all popular in South Korea; instead, the Korean iRiver

MP3 player is found everywhere and is bought by consumers in resistance to

US models. There are of course darker sides to this condition of advanced

digitisation on South Korea's own terms. It is also notable, for example, that

South Korea has now been engaged for several years in the world's first-ever

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[5] As will be see in the figures in Chapter 1, South Korea today is probably the single largest
per-capita user of the internet.

'cyber war' across the internal border. It is just that the rest of the world hasn't seemed to notice this prolonged battle going on.

The conditions of South Korean architecture

The size of the market for architectural and urban design has increased in proportion to the expansion of the domestic economy of South Korea since the 1960s, with a noticeably increased rate of growth over the last decade or so. It is estimated that the construction industry in South Korea constituted about 13.5% of GDP in 2010 (higher than the c.10% of GDP in the USA or Britain).[6] In that year, the value of domestic construction amounted to £93bn, equivalent to c.80% of the total value of building work (£118bn). Furthermore, the total value of overseas construction work amounted to £24bn, adding an extra c.20% to the total value of building carried out by South Korean firms. Of course, the vast majority of that income went to construction companies, as opposed to architects or urban designers for their fees. Nonetheless, it is clear that the realm of architectural practice has therefore expanded in recent decades in South Korea, and as a result has also become more diversified to meet the demands of a sector which requires ever more specialization. On the other hand, as a general phenomenon in the pattern of the architectural and urbanism market, the size of individual projects has become so gigantic and complex that the size of architectural firms has had to become bigger correspondingly.

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[6] The proportion of the construction industry in terms of national GDP: South Korea - 16.4% (2009), World - 13.4% (2009), Japan - 11.8% (2009), USA - 10.5% (2009), UK - 10.6% (2009), Spain (2009) - 15%.

Considering that most of these big-scale public projects are being virtually monopolized by the very largest architectural firms,[7] it means that the persuasive power of regarding architectural production as an enormous organisational has become a serious reality in South Korea.[8]

Figures also show that there were a total of 65,251 construction enterprises in South Korea in 2012, a figures which only slightly decreased by 0.3% (218 enterprises) from 2011. The value of construction work completed rose slightly by 3.7% from £112bn in 2011 to £118bn in 2012.[9] A few architectural firms such as Space Group and Junglim Architecture, established almost 40 years ago in the wake of the modernisation boom of the 1960s, have long been the main power to lead Korean modernism. Other large architectural firms began to be set up after the mid-70s when architectural offices including SAC and Samoo affiliated with conglomerates to increase their weight. Thereafter a number of practices dramatically expanded their size to pursue large-scale economic goals with the help of the frantic building boom in the 1980s, spearheaded by the 1988 Seoul Olympic Games and the construction of a number of new towns. After that, several independent large firms made their first appearance from the mid-1990s, even if the financial crash a few years later soon stemmed this tide.

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[7] Contemporary top-ranked architectural organizations in Korea such as Junglim, Space, Heelim, Samoo and Kunwon are showing the desirable tendency of synthesizing conceptual ideas and advanced digital design technology. By pursuing architectural production as a system, the cultural weight that these very large architectural firms have is enormous in Korea, far exceeding the influence of smaller "atelier" architects and those in other categories.
[8] The combined value of the top 100 construction enterprises in South Korea totalled £45bn in 2012, accounting for 38.8% of the total value of construction (up from 37.1% in 2011).
[9] The number of construction enterprises in the Seoul Capital Area (i.e. Seoul, Incheon and Gyeonggi) was 24,097 firms, around 36.9% of the total enterprises in the country. The number of construction companies in the other regions was therefore 41,154 firms, that being the other 63.1% of the total.

What it means today in South Korea is that these large architectural offices are small in number but their market-share is extremely high, and as many commentators have been pointing out recently, this bipolarization between large firms and the small- and medium-sized enterprises is getting deeper and deeper in Korean architecture and urbanism. It is indeed a somewhat worrying trend given that it is tending towards a monoculture of architectural design production.

The characteristics of large architectural firms in Korea can be summarised as follows: the provision of a total client service, team-centred departmental organization, mostly unsystematic management and administration, and a real need for identity making in an increasingly homogenous marketplace. Most of these large practices, except a few which focus on the housing design sector, also possess a comprehensive ability to apply diverse forms of project management to cater for a wide range of market demands, enabling them, for instance, to provide design services in the realm of urban planning, contract supervision, and facilities management. They all tend to use a matrix system in which a project manager operates his own team according to each project, working within a strict departmental organization for the overall organisation. It has to be pointed out that many also feel a continual need to check their own identity, and beliefs and values, since most of these architectural practices have gradually grown from being small firms to large enterprises for almost 30 years now. It would be almost impossible to recognise today's large firms in South Korea from what they were like in previous decades.

Turning now to the issue of how architects are educated and socialised in South Korea, the fixed period of training has recently been increased from four years to five years (the usual timescale in western countries). This has for some time now been a major issue within architectural education, and is even more controversial because one of these training years can just be focused on specific certificate programmes, rather than training in architecture more broadly defined. This is because for several years it has become the dominant teaching approach within architectural education in South Korea to show students how master technical skills such as digital CAD drawing, CNC milling, vacuum forming, laser-cutting, 3D printing, etc. More recently still, the study of Parametric Design has started to attract a fair amount of attention, again with a strong emphasis on digital skills training. Perhaps this is not so surprising given that departments of Architectural Engineering generally take the front-ranked positions among South Korean architectural schools.[10] It has correspondingly become rather neglected to study theoretical issues such as architectural history or the development of critical thinking about architecture and urbanism. The construction of structures and dealing with environmental engineering requirements are the main focuses, and what can be described as object-oriented education is dominant. The total current number of architecture-related students on all kinds of courses in South Korea is 43,952, of which 26,442 students are in universities that up until recently required 5 years of training and a further 17,510 are in technical colleges studying for lesser qualifications with

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[10] The number of such departments is as follows: architectural engineering 92, architecture 20, interior architecture 6, construction facilities technology 4, architectural design 3, architectural system technology 1, and construction environment technology.

only 2 years of study. The number that graduates each year in South Korea is therefore around 5,476 students (2,703 of them in universities, 2,773 in technical colleges). These students undertake their learning in a total of 127 architecture-related schools of all kinds across the country.[11] If we take the view that it is those taking the hitherto 5-year courses, now of course to be cut to 4-year courses, which correspond most closely to the definition of an architect in Britain – with those in South Korean technical colleges more like architectural technicians – then it means that with some 26,442 of the former students in South Korea, out of a 2013 population of just 50.22 million, this is notably higher than the 15,000 or so studying the subject in the United Kingdom, which has a current population of 63.2 million. But this discrepancy is undoubtedly due to the fact that in South Korea there is a much larger proportion of students who are on architectural engineering course, a category all but unknown in Britain. All this suggests a situation where there is around parity in the proportion of architectural students per head of population.

Architectural education in South Korea started during the era of Japanese Occupation from 1910 to 1945. As a consequence, the Korean architectural education system was set up to be geared towards creating engineers and functionaries, but not independent and creative designers (who were seen as being provided by Japan); this bias still affects the schools of architecture even today. The current situation relates to a notable schism in architectural

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[11] The breakdown of the number of these departments is as follows: architectural engineering (92), architecture (20), interior architecture (6), construction facilities technology (4), architectural design (3), architectural system technology (1), and construction environment technology (1).

education in South Korea, where there was a real revolution in courses within the university system in the 1980s. As a result of this, many courses in architecture came to separate themselves deliberately from engineering in order to follow a more westernised model. What this means is that, like many countries still in the Middle East and Asia, architecture was seen as part of engineering in South Korea up until the early-80s, and that many architectural engineering courses still persist, but what would be regarded in most western nations as architectural courses have managed to maintained a cultural position within an otherwise still engineering-dominated system. Urban planning and urbanism had emerged as subjects of study as a result of the impact of the 1980s reformation of architectural education. Universities in South Korea thus began to set up the internationalisation of their curriculums and began increasingly to accept western architectural inputs such as history, theory and digital design technique. Along with this institutional readjustment, the process also accelerated the realisation by the best Korean students – who previously might have only studied traditional models – that it was important of them when possible to study abroad in Europe, Australia, Japan and, above all, the USA. Ever since the 1980s, the proportion of South Korean architectural students who have ventured abroad at some stage of their education – and I happen to be one of them! – has steadily increased, providing them with a broader variety of experience of the architectural world, and opening up their eyes to the diversity of approaches to architecture. In the 1980s many architects in South Korea who studied or travelled abroad were very interested also in the phenomenon of post-modernism, and so it was not just about producing a form

of modernism to suit the country's economic development. These younger Korean architects could also begin to expand their architecture language through communication with other international students and tutors who come from different cultural backgrounds, even though there is also a high degree of 'culture shock' and often conflict. As students abroad they have opportunities to meet directly with diverse types of architectural forms and theories in real time, and to get a very different experience of architecture worlds that are not like South Korea. However, as well as being empowering, this situation creates the problem of an identity crisis in which these South Korean architectural students might have more traditional 'DNA' as their internal cultural power and are trying to combine this with new perspectives based on multinational information and conditions created by globalisation. The experience of those who studied and travelled abroad in places like the USA and Europe has helped to change the prevailing values, but it is a slow pace of change.

The present South Korean architecture scene

In official terms, there are two types of architectural and urban sector institutes in South Korea: national and regional institutes. The Architecture and Urban Research Institute (AURI) is hence a national institute; regional institutes include those such as LH (Korea Land & Housing Corporation), Seoul Development Institute, Gyeonggi Research Institute and so on. As a very important body, AURI deals widely with the issues of landscape, residential design, urban redevelopment, building policy, and the creation of greener cities.

Important research initiatives include that of investigating and creating an

'Architecture Policy Basic Plan' as perhaps the most important theme because it

will then be used as a guideline to set up 'Regional Architecture Basic Plans'

across the country.[12]

The increasing diversity of architects in South Korean architecture is the result

of accumulated experiences over the past half-century and the mutation of the

genes conducted by training new architects. In terms of approaches to Korean

design, the first generation of more modern architecture came in the period of

Japanese occupation up to the Second World War, when an idea of modernity

tended to be mixed with Romanticism. This was followed by the second

generation of modernism in South Korea that spread through the post-war

reconstruction of the country and the importation of modern culture, largely from

the USA and temporarily held up by the Korean War (1950-53), an important

conflict in a wider struggle between capitalism and communism that had

become known as the 'Cold War'. A third generation of modernising architects

came to maturity, as noted, in the 1960s consumer boom and can be said to

have helped push the country throughout the 1970s. More recently, we have

had a fourth generation that was centred around Group 4.3, following which we

have come to the present situation – and this contemporary slice of architects in

South Korea very much includes a sizeable proportion who received an

international education before come back to Korea to practice or teach. The

learning experiences and architectural methods they brought home with them,

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[12] Current research work is being focussed on Basic Plans for Gyeonggi Province and North-Jolla Province, largely to promote the protection of the *Han-ok* (Korean traditional house).

especially from the United States and Europe, are now being mixed together with each other in a fluid situation in South Korean architecture now. The road that these often different architects have taken to penetrate the Korean market is closely linked also to the country's opening up of it architecture market, which as noted has resulted in a far greater cultural exchanges with foreign architects. The latter have been introduced, sometimes brutally, by them winning international design competitions, by joining building consortia, or as independently invited architects sought after for particular skills or approaches. All of these kinds of influences will of course be revealed in the course of this thesis, largely in the last two chapters.

Over the past five decades, the main focus of debate within South Korean architecture has changed from issue of traditionalism and nationalism to that of how one might deal with the great diversity of architecture and urbanism today. Traditional references to the concept of nationalism in South Korea emerged as the main aspect of Korean identity from the 1960s to the 90s, not least of all in architecture and urban planning.[13] Historical artefacts were treated as important sources, and this idea that "the past ha[d] been transmitted as tradition"[14] was retained as the main slogan in the initial phases of architectural modernism. Traditional architecture still carried enormous historical significance because architects had to find the answer to any design issues by searching throughout a long history rather than just deciding things in the basis of personal pride or

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[13] Mega-scaled urban and architectural projects in these decades include those for the Seoul Olympic Games (1988), the National Capital Plan (1976-79), the GangNam Development (1968-75), and the Yoido Plan (1968-69).
[14] Walter Benjamin, *Illuminations* (New York: Schocken Books, 1985) p 38.

vanity. Architectural culture in South Korea was therefore exposed at the same time to both tradition within nationalism and function within modernism, and tried to combine these forces in one direction. Until 2000, this notion of a version of modernism adapted to conditions in South Korea was regarded as the correct approach for creating the architectural environment, yet it was also becoming increasingly clear that this version of foreign dependency was not going to be able solve the pressing problems of urban expansion. Now with increasing numbers trained abroad, and with greater knowledge of what was happening elsewhere through globalisation, South Korean architects started looking for alternative approaches by setting up numerous international competitions or finding ways to cooperate with foreign firms. The result was that the main body of discussion about Korean architectural identity has now, with more attention being given to the characteristics of contemporary architecture since the turn of the 21st century.

As will be discussed at more length in the thesis, the clearest example of a search by South Korean architects for a new global approach from elsewhere was the sudden fashion for what is termed 'landscape urbanism' – an essentially American movement which first emerged in the mid-1990s.[15] Its ideas are based on the large-scale remodelling of disused brownfield sites in post-industrial cities not through architecture but through extensive landscaping

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[15] See, for example: James Corner, *Recovering Landscape: Essays in Contemporary Landscape Architecture* (New York, NY: Princeton Architectural Press, 1999); Mohsen Mostafavi et al, *Landscape Urbanism: A Manual for the Machinic Landscape* (London: Architectural Association, 2003): Charles Waldheim (ed.) *The Landscape Urbanism Reader* (Princeton Architectural Press, 2006).

projects, many of which however also include substantial amounts of submerged building in disguise. 'Landscape urbanism' was first theorised by Charles Waldheim and put into practice by the likes of Stan Allen, James Corner (Field Operations), Foreign Office Architects, West 8, etc. Until the introduction of 'landscape urbanism' into South Korea from 2000 onwards, theories of city development based on typologies and contextualism had not been seen as suitable for Korean reality – with the outcome being that new planning initiatives had failed to produce any meaningful results in cities. The realisation of this previous failure is the reason why 'landscape urbanism' came to be introduced to South Korea from around 2000, and if anything has become the dominant movement in the country since then. Yet, as will be argued in this thesis, once 'landscape urbanism' was transferred to the different Korean cultural context, its major concepts came in turn to be transformed, generating new design methods and patterns and to connect the constituent elements of the built environment. It is hence important, when we are looking at the situation of contemporary architecture and urbanism in South Korea, to analyse the range of theoretical approaches to cross-cultural studies in existing western architectural discourses to ask what is happening: for example, there are crucial issues of criticality, aesthetics, materiality, and so on which need to be addressed. This thesis thus attempts also to examine how ideas such as 'landscape urbanism' come to be transformed within a different cultural context by employing the ideas and approaches from other intellectual disciplines, and using other forms of words and images.

Survey of literature

It is unfortunate but true to point out that there does not exist and exhaustive body of literature on contemporary architecture in South Korea, making the traditional literature survey found in PhD theses to be somewhat redundant. No doubt this situation will change in due course, as more scholars examine post-war architectural modernism and the effects of globalisation on the country.

However, there are some interesting contributions to the discourse, many of which actually come from different intellectual fields. The aesthetics theorist, Jin Jung-kwon, is one who examines the current conditions of the residential environment found in the buildings and cities in South Korea, and his fascinating texts reveal how far advanced digital technology is taking a powerful position with homes as well as in other aspects of daily life. Now, it would seem, that Korean have developed a form of fear that they cannot survive without having a blind faith in technology, or at least accepting each and every technological innovation as it emerges. Traditionally in South Korea, the normal residential environment was seen as one where people could live on earth in harmony with nature, yet today the widespread preference is for an artificial environment sustained by data flows – he points out that the word "data" originates from a Latin word "datum", which meant "something given." In this sense, data has now been transformed from "something given" by God to "something artificial or made" (factum). Residences seem to want to become site of Science Fiction fantasy, and amid such changes, the single place around

the world which shows the change most distinctively appears to be the Republic of Korea.[16]

As noted before, the Korean architects Park Jin-hee and Hong John have openly criticised the conditions in which the distribution of large public architecture projects is being monopolised by the mega-Korean firms or by 'star' foreign companies moving into South Korea. They believe that this situation does not contribute positively to the architectural and urban environment, perpetuating a tendency towards foreign dependency. In this regard, the ever-increasing scale and complexity of public projects has engendered new alliances between large-scale South Korean architect-engineering practices and "name brand" international architects. It is important to recognize in such collaborative undertakings that any successful form of architecture must be rooted in the cultural milieu, and in this case the sensibility of the Korean psyche, and hence any self-referential "signature" building which is dumped onto a city by a star architect does nothing to help the development of a wider architectural discourse.[17]

Yoo Kerl is another architect who indicated only too clearly the serious problems in the residential environment in South Korea. He refers to the notion of "buildings without architects" in order to suggest that good buildings can be built without architects, and conversely he criticises those Korean architects

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[16] Jung-kwon Jin, 'Diagnosing rapidly changing Korean society', in Kwon Soon-joo, Kim Jeong-ok, Chung Dah-young, Lee Jae-jun (eds), *Faster and Bigger* (Seoul: Space Publishing Co, 2007) p 66.
[17] *Ibid.*, p 35.

who only pay attention to creating what they see as an aesthetically pleasing physical environment, without consideration to how people might live in the resulting forms. He writes, provocatively:

> I believe that everybody should become an architect. These vernacular architectural buildings have recently often led to discussions on themes such as sustainability, variability, and environmentality of architecture. Korea's residential environment has a few serious problems. One of them is the almost identical array of houses and layouts offering very little choice.[18]

Blunt criticisms of current architectural and urban conditions in South Korea are very helpful for the argument in this thesis, which takes on an established architectural culture which is generally conservative and too deferential to those in power. This fossilised vision of Korean architecture is at complete odds to the very urgent and dynamic changes which are taking place in the country, such as through the impact of advanced information technologies. How can architecture and urbanism stay the same when everything else is changing so quickly and so dramatically around them in the intensifying conditions and networks created by globalisation.

Thesis structure

This the key prompt for this PhD thesis is the response of architects and

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[18] Kerl Yoo, 'Faster and Bigger', in Kwon Soon-joo, Kim Jeong-ok, Chung Dah-young, Lee Jae-jun (eds), *Faster and Bigger* (Seoul: Space Publishing Co, 2007) p 16.

urbanists in South Korea to the rapid urbanization which is based on the new information society – this is nothing less than a wholesale shift in urban transformation. While the impact of globalisation, new digital technologies, socio-economic change and such like is fairly developed in other academic disciplines, it simply has not been studied as yet in relation to architecture and urbanism, in a profoundly Korean way, and so this is precisely where the originality of my study lies.

In order to structure my analysis, the thesis will be divided into five chapters. Chapter 1, on 'Digital South Korea', looks at the highly digitised nature of South Korea. It shows that digitalisation has become all-pervasive in all areas of its cultural life, including architecture and urbanism. One needs to get this fully into one's mind to understand the basis of contemporary Korean culture, and thus for how architecture and urbanism might develop as a result. But the chapter also points to the corresponding potential weakness of attack across the Demilitarized Zone (DMZ) with North Korea. Being online so much is that this makes South Korea so vulnerable to cyber attack. Korea is thus the home to the first-ever full-scale 'cyber war' although most people in other countries don't even know it is happening. Chapter 2, on 'The South Korean Music Industry', will look at the widely prevalent music industry. The Korean music industry is a really important aspect of the highly digitised nature of South Korea, and in many ways now the most symbolic due to the success of 'Gangnam Style' and other worldwide pop music trends. It also happens to be one of the country's major economic engines, and as a vital element of cultural life it shows how

crowd-driven popular culture has become so prominent within everyday life. Again, the argument is made through this chapter that one needs to understand such conditions if one wishes to have any hope of rethinking Korean architecture and urbanism. Chapter 3, titled 'Bang Culture', examines this phenomenon as a leisure activity for all ages and classes, contained as it is in small specialised entertainments rooms set within large urban blocks to cater for a wide range of leisure pursuits enjoyed by Korean urban citizens in a notably collectivised manner. 'Bang' culture is the epitome of spatial culture, as well of an urban cultural condition in South Korea which continuously expands and yet is differentiated in many complex ways. This cultural production cannot be simply categorized according to the terms normally used in predominant western architectural theories and practices, and as such it is studied here as effectively the spatial 'key' to understanding Korean architecture and urbanism as a collectivised experience. Any successful architectural and urban changes in South Korea again need to find ways to build on the strength and uniqueness of 'bang' culture. Chapter 4, on 'Landscape Urbanism', looks instead at the fashion for Landscape Urbanism since around 2000. In particular it shows an example of the misuse of Western ideas in South Korea which just do not fit into the realities of everyday life and cultural practices. The thematic basis of 'landscape urbanism' is deeply flawed because it cannot take into account cultural reactions in Korea, as shown in the previous sections on the hyper-digitisation of people's lives, popular crowd-driven activities or 'bang' culture. Hence this chapter deconstructs Landscape Urbanism to show that it simply cannot work in South Korea, and hence a newer and better approach is

required to deal with architectural and urban issues. This leads on to Chapter 5, titled 'Theme Cities', which will look at themed cities in South Korea. These new 'theme cities' are a relatively recent urban 'Landscape Urbanism' experiment in South Korea. The case studies of urban projects will be used to examine 'innovation environments' approaches which how arts-based and cultural 'knowledge-based' clusters have transformed the new forms of regional regeneration. And then move on to put forward some new ways of thinking about how to design future interventions. This final chapter therefore pulls together the critiques in the preceding sections to argue for a new kind of architecture and urbanism in South Korea. Just as increasing economic, business, cultural and communication exchanges are now being developed between the two parts of Korea – despite the ongoing cyber-war mentioned before – so too larger architectural projects are required to create continuous urban projects predicated on innovative socio-economic environments. These must contain the crucial characteristics of South Korean architecture and urbanism: The use of a site on the contentious DMZ can act as a bridging and stitching tool between the two divided halves of Korea. Above all, I will outline a new kind of urbanism for a new city, themed around the creation and consumption of popular music city, and explicitly based on the principles of hyper-digitisation, crowd-driven popular culture and a highly differentiated and collectivised 'bang' culture which allows different social groups to mix together. In this sense, the DMZ acts as a 'free' space to experiment in, so that we can envisage a new and more cultural responsive form of Korean architecture and urbanism. It is important to note from the outset that this chapter will not so

much provide a master-plan or blueprint for a new music city, but rather it will set out some concepts and some initial ideas which hopefully South Korean architects and urbanists might take on and develop through their new buildings and urban interventions.

In the Conclusion, I will then recap the main points of the study, referring to the examples cited in each of the various chapters, and retrace the line of the argument in the thesis. This final part will also be used to stress the continual need to explore future creative possibilities for a culturally influenced urbanism in South Korea.

Chapter 1: Digital South Korea

1.1 Digital South Korea

2010 was the year of SNS[19] technology such as Facebook and Twitter and of

the Smartphone, with over 15 million users in South Korea alone. Driven by

convergence of communications with other industries, the 'smart' era of devices

like Smartphone and digital pads is radically transforming Korean society. South

Korea has ranked 3rd among 159 countries in 2010 in the IDI (ICT Development

Index), published by the ITU (International Telecommunication Union), and also

tops the ranking in the UN's E-Government Readiness Index (EGRI). According

to OECD Broadband Portal, South Korea is the leading country for wireless

broadband subscriptions, with 89.8 % of inhabitants and 95.9% of households

having broadband access, which confirms South Korea as a 'global Internet

powerhouse'. South Korea has already completed the 'BcN Establishment Plan

(2004-2010)'[20] and has embarked on the Giga-internet pilot network project[21]

in order to solidify the nation's stance as a global Internet network leader. In

addition, South Korea has also become the first country in the world to

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[19] Social networking service or *social networking site*, a website with multiple users where one user can publish content himself/herself and connect with others sharing personal or professional interests. 'SNS', http://en.wikipedia.org/wiki/SNS (accessed 12 March 2012).
[20] BcN means a next generation convergence network, which converge telecommunications, broadcasting and internet, can be safely and seamlessly provided everywhere, anytime. Kim Hyong-soon, 'A study on the third phase plan for establishing BcN in Korea', Advanced Communication Technology, 2009. ICACT 2009. 11th International Conference, (15-18 February 2009).
[21] 'The Giga Internet pilot project' (implemented by the National Information Society Agency : NIA), which aims to bring gigabit Internet connection to households by 2013, with 4 pilot services(Giga webzone, 3D IPTV based tele-learning, 3D VOD, Personal Media Server) provided by 2 consortiums(CJ Hellovision, KT) to 4 'Giga Towns' (apartment complexes) in 4 cities(Seoul, Busan, Suwon, Gwangju). 'Network Policy & Wireless Broadband Policy', www.ncc.gov.tw/english/.../263_101108_1.docx (accessed 8 November 2010).

demonstrate the 4G technology LTE-Advanced. The government plans to accomplish its vision of creating the world's smartest network starting with the delivery of 10Gbps – roughly 100 times than what is currently available – by 2020, promoting services for 'cloud' computing and M2M (Machine-to-machine communications), and establishing business ecosystem dedicated to fostering new businesses and other Internet start-ups.

Figure 1.1: South Korean users shop by scanning QR codes on their Smartphone in a subway station.[22]

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[22] Source: 'Tesco virtual supermarket in a subway station', http://www.designboom.com/technology/tesco-virtual-supermarket-in-a-subway-station/ (accessed 6 July 2011).

As one recent example, Tesco Homeplus opened a virtual grocery store in a South Korean subway station, where users shop by scanning QR (Quick Response) codes[23] on their Smartphone. In a campaign designed by the Seoul branch of advertising agency, a large, wall-length billboard was installed in the station, designed to look like a series of supermarket shelves and displaying images and prices of a range of common products. Each sign also includes a QR code. Users scan the code of any product they would like to purchase, thereby adding it to their online shopping cart. After the web transaction is completed, the products are delivered to the user's home within the day. The strategy makes productive use of commuters' waiting time, while simultaneously saving shoppers time spent going to the supermarket.

The rest of the world is still moving customers from narrowband (dial-up) internet access to broadband. Narrowband is typically at between 1Mbit/s and 10 Mbit/s speeds, whereas South Koreans are served at speeds from 50 Mbit/s to 100 Mbit/s, and since the end of 2007 the rollout of Gigabit speeds (1,000 Mbit/s) has started to be offered. In a very concrete way, South Korea is therefore literally 100 times faster in the digital realm than almost all of the rest of the industrialized world. This fascinating phenomenon, far from being merely

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[23] QR code is the trademark for a type of matrix barcode (or two-dimensional bar code). A QR code is read by an imaging device, such as a camera, and formatted algorithmically by underlying software using Reed-Solomon error correction until the image can be appropriately interpreted. Data is then extracted from patterns present in both horizontal and vertical components of the image. As a variety of industries utilize the QR code today, the applications for use can vary from product tracking, item identification, time tracking, document management and general marketing purposes.
'QR code', http://en.wikipedia.org/wiki/QR_code (accessed 23 July 2012).

virtual replacing the physical, has instead created new forms of occupation of space. The Internet, SMS mobile phones, etc, now double as navigational devices with which we traverse the endless territory of the city. This, in fact, has intensified the use of public space in South Korea: the latter is no longer based on principles of 'centre' and 'periphery and hierarchy' but on a completely new way of understanding and using public space. The virtual becomes a code; a form of bringing together if not communities, then at least groups or tribes which may otherwise remain unknown to each other.

1.1.1 Highest Speed

A survey by analysis of the speeds and costs of broadband across the developed world in October 2006 found that South Korean broadband had the highest top speed and its average sustained speeds were the second highest, while its prices were lowest in the world. South Korea is the obvious world leader in the internet, now with per-capita penetration of broadband having passed 100%, and with all of internet users having migrated over to broadband. Reflecting that internet leadership, South Korean broadband speeds are still today the world's fastest and the costs of broadband the world's lowest. The rest of the world is still moving customers from narrowband (dial-up) internet access to broadband. That is typically at between 1 Mbit/s and 10 Mbit/s speeds. South Koreans currently are served at speeds from 50 Mbit/s to 100 Mbit/s, and by end of 2007 the rollout of gigabit speeds (1,000 Mbit/s) will start to be offered. In a very concrete way, South Korea is literally 100 times faster in the digital

world than almost all of the rest of the industrialized world.
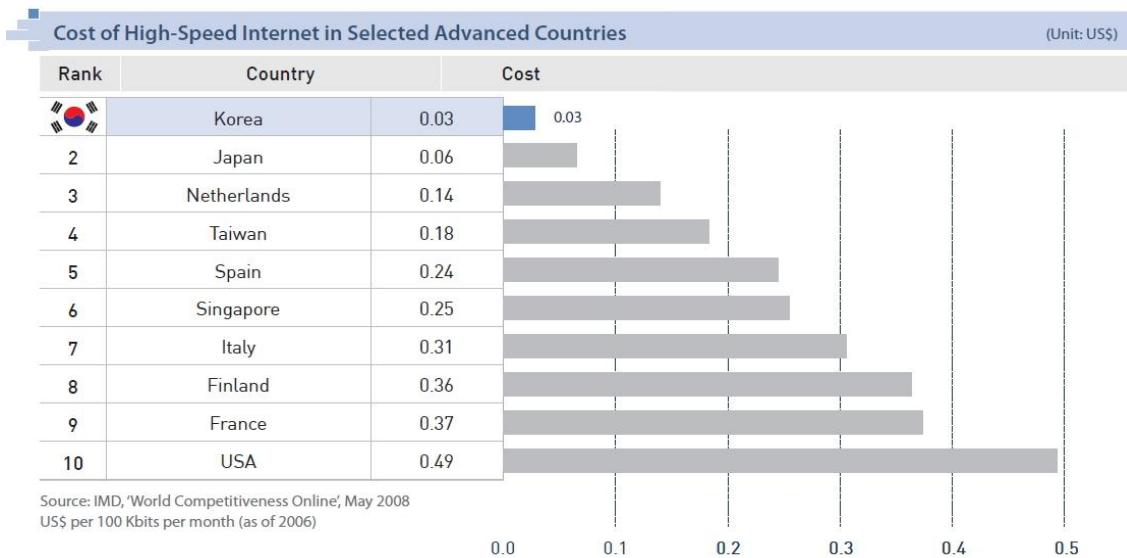
Figure 1.2: Cost of high-speed internet in selected advanced countries. Source: IMD, 'World Competitiveness Online', May 2008. Unit: US$.

1.1.2 World Leader

Some 90% of South Korean homes have broadband internet access, whereas the world average is about 20%. In addition, 63% of South Koreans make regular payments using their mobile phones, whereas the world average is still under 5%. Some 43% of South Koreans maintain a blogsite or personal profile online like Americans or British might have on MySpace or the British on Facebook (the industrialized world average is about 10%). Over half of South Koreans have migrated their mobile phone account to 3G (the world average is 5%). As noted, 100% of South Korean internet access has migrated to broadband (the world, about 30%). A staggering 25% of South Koreans have

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played the same multiplayer videogame – Kart Rider[24] – average 40% of South Koreans already have a digital representation of themselves, a so-called avatar such as western people might do who play Second Life or Habbo Hotel. By every measure, South Korea leads the world in digital adoption and innovation. In a very literal sense, South Koreans are living in the near-future of the digitally converging technologies from the viewpoint of the rest of the world.

International Market Share of Korea's Key IT Products (as of 2009)

- Memory semiconductors — 1st — 61% Korea / 39% Other
- Displays — 1st — 43.8% Korea / 56.2% Other
- Mobile phones — 2nd — 30.6% Korea / 69.4% Other
- Digital TVs — 1st — 36% Korea / 64% Other
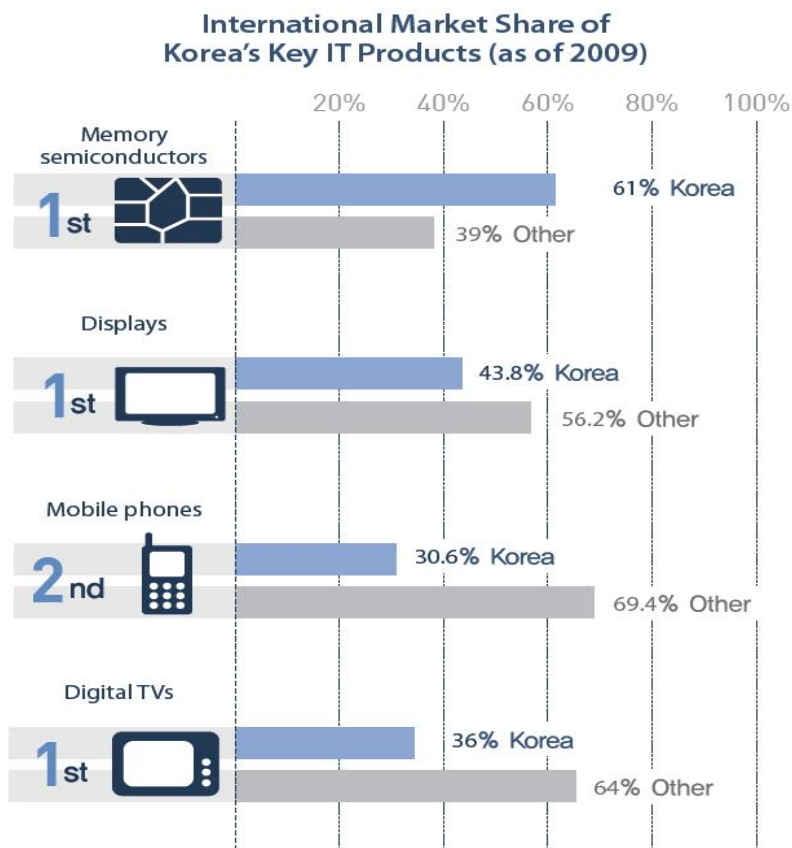
Source: Samsung Economic Research Institute (2010)

Figure 1.3: International market share of Korea's key IT Products (as of 2009). Source: Samsung Economic Research Institute (2010).

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[24] 25% of South Korean population have played the same multiplayer online game, Kart Rider (source: Nexon 2006). Tomi T Ahonen and Jim O'Reilly, *Digital Korea*, (London: Futuretext Ltd, 2007) p 52.

One of the significant lessons from South Korea is that the digital divide or gap between expectations and access to digital benefits of urban citizens and rural citizens is becoming smaller. These days the barrier to digital and community connectivity and interaction via fixed or mobile access is much smaller and particularly youth consumers aspiration in smaller towns and remote villages are narrowing, be they in South Korea, China, Ireland, Poland, USA or Chile. Infrastructure is becoming easier and less expensive to implement and at the same time increased demands of users for multi tasking, and multi access point is increasing. The difference in the behaviour of South Korean youth compared to international youth in how they access digital content and services is also narrowing. Of course the urban population of Seoul will have an advantage into the immediate future as they continue to enjoy advantages of innovative cutting-edge (and indeed bleeding edge) technologies at greater pace than other urban cities. Nevertheless, due to the blogosphere, multinational online gaming, international chat boards and cross-cultural digital communities, the awareness factor but perhaps not the intensity of interactivity of Gen C[25] is high also internationally. While others may envy the extent of the digital environment of South Korea, most of the early adopters in other countries will experience at least partially those same elements and experiences. Only not all of them are together already in one place like in South Korea.

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[25]   Generation-C as the Community Generation was introduced in the book *Communities Dominate Brands* (Ahone & Moore, 2005). The defining characteristic of Gen-C is that for the fist time in mankind's history a new generation is growing up with permanent, 24-hour support of the friends, colleagues, community. The umbilical cord or the "lifeline" for Gen-C is the cellphone and the secretive cryptic connection method is SMS text messaging. One form of communication reigns supreme for Gen-C, and that is SMS text messaging. Tomi T Ahonen and Jim O'Reilly, *Digital Korea*, (London: Futuretext Ltd,2007) p 17.

Figure 1.4: Households with broadband access of major OECD members. Source: OECD, OECD Broadband Portal, July 2010.

1.1.3 Cyworld

Young-Mok Kim (SK communications Director) led the personal media market in Korea by developing 'Cyworld', Korea's first one-man media service, into the largest SNS in Korea. Through Cyworld, it became possible to express emotions on the Internet, and communication between humans was further activated. As a result, Cyworld contributed to the development of social networking in Korea.[26]

When IT experts in the western countries started to talk about advanced social networking sites in late-2006, they tended to mention the video-sharing site,

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[26] Jae-myung Lim, (ed.) 2012 Korea Internet White Paper: Developer of Cyworld, the first personal media in Korea (Seoul: Korea Internet & Security Agency, 2012) p 32.

YouTube, or the picture-sharing site, Flickr, personal profiling and chat-room sites, Facebook and MySpace, blogging, or the virtual reality worlds like children's Habbo Hotel or the game for adults, Second Life. Often commercial 'social' sites like the bookseller Amazon (with comparable its user-reviews) or eBay (auctions as a social activity) were often also mentioned. While these are among the concept leaders in the western world for these started sub-categories, the world's most advanced social networking site - and by a wide margin – is in fact Cyworld in South Korea. It already offers video-sharing like YouTube, picture sharing like Flickr, personal profiles and chat-rooms like MySpace, blogs, virtual reality worlds like Habbo Hotel and Second Life, plus commerce like Amazon and eBay – but all rolled into one. Whereas western single-purpose sites like YouTube or Myspace, are used typically only by about 20% of the total population, Cyworld is already used by 43% of the South Korean population. Cyworld first launched in 1999 in South Korea, aiming for the youth segment as a personal profiling, chat and virtual site, and later it was bought by SK Communications (part of the SK Group best known for SK Telecoms). Cyworld was initially just available on the internet, but its mobile phone technology arm was launched in 2003. Of the various kinds of mobile access, by far the majority of uses today are available on advanced 3G mobile phones.

Given that Cyworld is a multiple-function online social site, it is almost impossible to describe all the features it possesses. Cyworld's impact on several related industries like music, gaming, virtual worlds, etc in South Korea

is enormous. Almost 90% of all pictures sent from mobile phones in South Korea do not go to other mobile phones, but instead to the picture-sharing service at Cyworld. In a country one with just a sixth of the population of the USA, Cyworld has already become the world's second largest digital music store, behind iTunes while iTunes sells in countless countries, Cyworld sells music only in South Korea. The SK Communications CEO, Hyun-Oh Yoo, pointed out that at 100,000 daily uploads, Cyworld generates more video uploads than YouTube. Payment in Cyworld is handled with Dotori (acorns) and these can be purchased, for example, through your mobile phone account. Using them, digital items inside Cyworld, whether user-generated content or branded content, can be bought and sold. When nearly half of the total population of a country lives inside a virtual world, then of course every major consumer brand will also want to be in there. Cyworld had already 30,000 corporate/business customers with a digital presence inside Cyworld, selling over half a million items of branded content, by the summer of 2006. This creates a very healthy revenue stream for SK Telecom, which makes a 40%[27] revenue share cut on any digital content that is sold inside Cyworld. Cyworld earns money out of its earnings of branded digital content sold inside the social networking site. Cyworld's content and properties such as decorations and furnishings for the Miniroom and customizing and updating the avatar are paid for in Dotori. Third-party content is likewise paid for in Dotori. In addition, Cyworld users can sell content they have bought or created themselves, and charge for it in Dotori. Right from its beginning Cyworld has therefore been built

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[27] Kung-mo An, *Music Industry Book 2008* (Seoul: Korea creative content agency, 2009) p 27.

around a robust commercial foundation, allowing users and third-party content owners to enjoy the full economic benefits of membership.

> Cyworld was able to position itself as the largest SNS in Korea with the merit of enabling easy updating of personal contents such as photos and videos on the mini homepage. The 'Brand Mini Homepage' was launched in 2005 to enable ordinary companies to use the mini homepage for communication with customers. The service has received many favourable responses for its creative new way of using SNS.[28]

Perhaps the most striking first impression of Cyworld for western visitors is its user interface. The "mini-homepy" (mini-home page, or blogsite, would be the best western equivalent), with its "mini-room" (my room, similar to a Habbo Hotel room), and "mini-me" (avatar, a digital puppet as one's digital visual representative). These have a distinctly Asian, almost Japanese "Hello Kitty" type of appearance which can perhaps be thought of as being child-like. This appearance might put Cyworld off especially say to older executives waking in telecoms, IT and media. The miniroom is your virtual property, like an island or house in Second Life or a room in Habbo Hotel, you can invite friends to visit your mini-room and then you can engage with them there. You can entertain your friends, for example, by sharing music and pictures. Like yourself, you will want to customize the "mini-me" avatar in terms of dress, haircut, whether is it male or female, etc. It is all up to you, and the same goes for the room: do you

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[28] Ji-yul Yoo, (ed.) 2011 Korea Internet White Paper (Seoul: Korea Communications commission, 2011) p 22.

want a sofa, a table, a window, etc. Some of the basic customization elements are available for free, but of course the rest of the customization process will cost you money.

Figure 1.5: Cyworld miniroom homepage. Source:http://www.cyworld.com/lop8888.

The trade of virtual goods and services inside Cyworld was worth over ₤300,000 per day by 2006, which works out to a turnover of more than ₤7,000,000 worth of trade per month. It is a remarkable vibrant marketplace if you consider that Cyworld was not set up explicitly as a trading community such as Amazon, eBay or iTunes. As the main music relate in South Korea, Cyworld is now a truly exceptional music store. Indeed, Cyworld has become a vast commercial world, in addition to a social networking site. In many ways the extent of commerce inside Cyworld was a precursor for many of the better-known western online-multi-player games like World of Warcraft and

Counterstrike, or virtual reality environments like Second Life and Habbo Hotel. Inside Cyworld, the content for sale includes virtual properties for consumption, such as Levi's jeans and Nike sneakers for your avatar, as well as virtual sales of goods or services consumed in the real world, such as airline tickets or insurance.

> Cyworld Music is performing the role of real-time music media. We will develop the music service as a communication tool within a social-networking service.[29]

Cyworld has become the second online music store in the world to sell more than 200 million songs a month, after Apple's iTunes Music Store first achieved the feat in 2004, its operator SK Communications states. The most popular social network service has been selling songs for 30 pences each, as background music of mini-homepages, meaning it has garnered over £60,000,000 from the music business since it launched in July 2002. Although its the sales figure is less than one-tenth that of iTunes Store, which has sold more than 2 billion songs, Cyworld's achievement is a rare success in a country where copyrights on intellectual properties are less respected than in other developed nations and its music industry has been on a downward spiral for many years.

> As the Web is evolving into one-man media, people now don't buy BGMs just to listen by themselves. They use them as a tool of expressing themselves to others.

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[29] Jun-young Jang, 'Cyworld's Seoul newsletter', (2008) p 78.

Cyworld will continue to cater to the demands of our customers by providing a wide variety of songs, and will help the online music market get stabilized.[30]

Cyworld has more than 400,000 songs available in its stash. The most popular song from the network was "Snow Flower" from the singer, Park Hyo-shin, which some 660,000 users had purchased. All of the top 10 songs, and around 60% of all songs available, are Korean songs. "Life Is Cool" by Sweet Box was the best-selling item of foreign music. SK Communications, the operator of Cyworld, said it takes less than 40% of the sales as commissions and the rest goes to labels and musicians. Cyworld has established a unique business model that distinguishes it from other popular online music shops. While Apple's iTunes Store and Korea's Soribada peer-to-peer service sell songs that can be played on portable gadgets as well as PCs, Cyworld has adopted a streaming service that means users must be connected to their mini-homepage in order to listen to the music they have purchased. While playing, the songs are stored in the user's PC, but they are deleted as soon as the window is closed. There have been a number of hacker attempts to decode the hidden music files and copy them, but Cyworld has so far repelled the threats by frequent upgrades to its streaming system. Online social-networking site Cyworld said that it has sold 300 million songs, adding 100 million in only one year. The music sales are steadily increasing year-by-year despite the number of visitors to the site remaining stagnant since last year. It took three and a half years to sell the first 100 million songs, and a year and a half for the next 100 million. Music has

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[30] Hae-yeol Lee, 'SK telecommunication Seoul newsletter', (2008) p 66.

become an inseparable part of young Koreans' online life.

1.1.4 Naver

> Not only pictures but also videos and bulletin writings can be easily updated
>
> through Cyworld's mini homepage, and spaces for the expression of one's own
>
> personality such as MiniRoom, Mini Me, and Skin were created. Soon enough,
>
> there occurred a social syndrome known as 'Cying'. The 'Cy good world' was
>
> created to connect various social contribution organization with Netizens, and
>
> 'NATEON', a messenger service, was introduced. NATEON became the No. 1
>
> messenger service in Korea, beating MSN.[31]

As the Korean consumer becomes more aware, there is an increasing value to

good and up-to-date information online. One of the answers to this need is the

shopping support site Naver.com in South Korea, which is an intelligent search

engine, optimized for shopping. Naver has search using common language and

phrases along with FAQ (Frequently Asked Question) sheets for common

products and services. The more advanced features depend on the knowledge

based systems supporting Naver.com. Users are invited to respond to several

series of questions to fine-tune the knowledge base for the consumer and

adding to the total ability of site. The more that users reply to questions, the

more they earn points that can be exchanged for gifts or money. The system

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[31] Hwa Jo, (ed.) *2010 Korea Internet White Paper* (Seoul: Korea Communications Commission, 2012) p 54.

verifies and validates respondents so that given experts will receive incentives to give answers in their fields of experience. This is like Amazon book reviews, except that Naver.com removes the random ignorant reviewer in favour of those who are competent at reviewing that given type of book (or movie, album etc). Naver.com has also become a major portal and its knowledge-based search is a strong tool to anchor loyal customers.

Another particular South Korean online phenomenon is the emergence of 'recommending' societies, which recommend and reject products and services. The endorsement of a recommending society can be very important for a new product and obviously the rejection of a product by a recommendation society results in significant reduction in sales. Among the many supplementary services on Cyworld, one of the most advanced is Nateon. Most instant messenger services and chat rooms today have poor facilities for communicating emotions and feelings here is again where South Korea has developed a lead, in part because so many people are there already, and in part because so many users spend so much time in Cyworld. Emotional Messenger was launched in January 2003 and rapidly overtook MSN Messenger and became the most used messenger service in South Korea due to its "emotion code". As it matured as a service, Nateon has adopted ever more typical virtual versions of South Korean behaviour. It offers gifts and allows users also to make gift requests.

1.1.5 Ohmy News

A particular impact comes from Ohmy News, the citizen journalism newspaper. Ohmy News has truly altered the media landscape in South Korea. In only four years, and with over 90% of its content generated by citizen journalists rather than professionally trained journalist staff, Ohmy News has reportedly become the fourth most trusted news source in South Korea. With over 50,000 registered contributors, the newspaper has effectively a whole army of reporters where most TV stations, radio news and newspapers can only support a professional staff dozens of so reporters at best. Thus Ohmy News tends to report on new trends and sudden changes in South Korea much faster than its traditional media rivals can do. Koreans are more likely to believe and be influenced by what other "average citizens" say especially on issues relating to shopping, so reports in Ohmy News can impact a given service or product's sale very rapidly. Opinion can be swayed fast and furiously and not necessarily via traditionally corroborated media sources.

1.2 E-Government

The South Korean government promised in 1995 to turn the country into a leading knowledge-based economy. It pledged £1 billion of funding for a new backbone network to begin the roll-out of high speed internet, plus soft loans to companies that promised to invest. It was phenomenally successful and helped up as a

shining example for countries hoping to transform their fortunes with technology.[32]

1.2.1 Digital Society

South Korea's government services start with the eGov portal. This impressive collection of most of the main government services combines over 500 separate services that are all integrated and executable online. Services and departments from healthcare to education, from taxes to law enforcement, etc are all covered. All services offer the digital files of government publications, and digital access to the related databases. Typical of the high rate of broadband internet and highly advanced cameraphone adoption, nearly all of the government services already offer audio and video clips to support the services. The South Korean sites are highly customizable by the citizen, with a majority allowing the user to manage his or her own activities. In addition, most sites offer mobile phone or PDA access, and nearly all allow visitors to sign up for e-mail updates. Also notable are the interactive features available for users such as posting comments, participating in surveys etc. Virtually every site contains a prominent guestbook or forum as well as the option to petition the particular department. Whereas most traditional governments in the industrialized world are accused of hiding behind bureaucracies consisting of tens of thousands of civil servants per department, in South Korea every bureaucrat can be reached directly in their given area of responsibility. Typical of how methodically South Korea approaches its goals, the government has

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[32] 'Digital revolution fast tracks piracy'.
http://www.thesundaytimes.co.uk/sto/business/article158152.ece (accessed 29 March 2009).

worked on tight schedules and ambitious plans, with broad support and ample

resources to achieve its objectives. After successfully completing eleven major

projects initiated in 2001 to form the basic foundation for the electronic

government, in 2003 South Korea selected 31 follow-up projects and

established an 'e-Government roadmap' to guide the nation and in its initiatives

and coordinate the activities. The roadmap is aiming to complete the

government-related projects by 2007 in a government-wide effort. In many

Asian countries it is still common to work to a six-day week. South Korea

recently adopted the five-day working week, which then dramatically increased

the available leisure time for its citizens. We should note that the working hours

in the five work days typically run very long by European and American

standards, and employees often still collect together for dinner together still

discussing work related subjects. Nonetheless, the fact that Saturdays and

Sundays are now holidays for many, has greatly increased available spare time,

and increased leisure activities. One of the great beneficiaries has been the

entertainment sector as the increase in spare time has in turn allowed a

dramatic increase in leisure activities online, from gaming to music, TV etc.

1.2.2 Ubiquitous Services

The word one hears currently from all South Korean executives, officials, and

experts in the digitally converging industries is "ubiquitous" -- e.g. ubiquitous

computing, ubiquitous internet, ubiquitous gaming, ubiquitous coverage, etc.

ubiquitous means "ever-present", or omnipresent; that something is everywhere,

accessible at any location. Oxygen is ubiquitous on our planet but water is not.

South Koreans are now on the verge of the world's first society where digital

services are literally ubiquitous. But it is not only about speed. In South Korea

almost 10% of the population already enjoy portable digital TV set-top boxes in

their pockets in their mobile phones and built into their cars and laptop

computers. For TV executives this means totally different viewing habits. No

longer is the classic primetime the only peak viewing point of the day. A new

peak for viewing is also lunchtime at work. In addition, a parallel viewing pattern

emerges when homes have multiple digital TV access points, not to mention

time shifting of IPTV[33] and PVRs[34]. For most South Koreans today, their very

lifestyle already revolves around services that require high-speed digital access.

The networks are state-of-the-art wireless networks and handsets: both

international standards of 3G networks have been launched Wi-Fi is offered on

the world's most extensive broadband wireless network and can be accessed

from 25,000 cybercafés located around the country.

1.2.3 Education

In South Korea today the influence of Confucianism is also very strong and a

deep bond exists between parent and child. This may result for example in

parents sacrificing their own interests when the teenager reaches working age

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[33] Internet Protocol TeleVision: a system through which television services are delivered using
the internet protocol suite over a packet-switched network such as the internet, instead of being
delivered through traditional terrestrial, satellite signal, and cable television formats.
[34] Personal Video Record: a device for recording and replaying television programmes and
films etc that uses a hard disk rather than videocassettes or DVDs and has various computer
functions.

and the parents take a diminished standard of living to allow the young adult to establish a good standard of life and start a career. This is then returned some years later, with the child returning the "loan" or support by diverting part of the income back to their parents. South Korean parents are also obsessed with educating their offspring – which helps to explain why the performance of South Korean students in mathematics, languages and sciences rank amongst the best in the world, almost on par with Finland. Because of this focus on education, parents are very willing for example to buy laptops to their children with high-speed internet access, etc. South Korea has mandatory military service for all males, which lasts for two years. This also means that boys tend to remain at home with their parents.

Human Capital Rank (EIU 2009 International IT Industry Report)

Country	Score
United States	
South Korea	
United Kingdom	
China	
Australia	
Ireland	
Taiwan	
New Zealand	
Canada	
Finland	
Russia	
Japan	
Denmark	
India	
Greece	
Swdedn	
Norway	
Italy	
Israel	
Spain	

Countries are scored on a score of 1-100. See Appendix3 for a full list of scores.
Source: Economist Intelligence Unit.

Figure 1.6: Human Capital Rank (EIU 2009 International IT Industry Report). Source: Economist Intelligence Unit.[35]

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[35] According to the 2009 International IT Industry Report released by the Economist Intelligence Unit, the level of Korea's IT human resources ranked second in the world just behind the United

All of South Korea's initiatives around digital Korea have kept this human focus, starting with education. South Korea has the highest university attendance rates in the world – 80% of high school graduates continue onto further education. With a work ethic valuing education and parents supporting their studies, the government and civilian sectors are investing approximately £61 million each year in IT human resource development, producing about 20,000 IT experts each year.

1.2.4 Demanding Customers

South Korean consumers are notoriously demanding and vocal in their criticisms of products and services. This also translates to prevalence of their negative comments online. South Korean online retailer services and reputations have become ever more sensitive to what consumers are saying about them online, because the South Koreans are significantly more likely to make critical comments than web users in other developed countries. When added to the intensely collaborative nature of community sites and blogs, the clustering of bad comments will rapidly influence any online retailer. If on western auction sites it is "Buyer Beware", then clearly in South Korea it is "Seller Beware". The digital footprints of bad customer experiences linger very long in the blogosphere and on social networking sites. Even though business culture and local habits do matter, in the online world digital reputation is

States, and just in front of the UK and China.

particularly important. The more there is true competition between providers and a larger market, such as that online in digital South Korean. Digital citizens will soon see through inferior offerings and easily verify customer service reputations.

This in some ways explains why the bar is set so high in South Korea for many high performance aspects of their ICT experience. Sadly in Europe and North America many initiatives do not succeed because users are sold inferior services on the basis that they may not know what quality actually is, or correspondingly services are not marketed at all based on a superficial reason. These gaps are closing fast as worldwide tech-savvy young people learn to navigate the digital universe and uncover bargains and verify capabilities of retailers just as easily as they discover hidden treasures in multiplayer games and navigate virtual worlds. Meanwhile in South Korea the newly enlightened consumers are clairvoyant master-shoppers perfectly versed in the real market value of what they pursue, knowing what it can do, who are its competitors and where it can be bought for the least. That is what makes South Korea such an exciting but merciless environment for new online marketers. The status of South Korea as a test-bed status will grow as increasing amounts of service and technologies are joined into the digital Korea framework. South Korean customers become even more powerful through a more potent infrastructure reaching ever more deeply into the country and society.

1.3 Internet Piracy

The unintended consequence of becoming the world's most wired country, supplying consumers with the fastest internet connections, is that Korea is also home to the most virulent online piracy. The problem is so severe that even out-of-pocket Hollywood studios have been forced to rethink their business models and the fear is that the same thing could happen in Britain. Broadband over fibre-optic cables, the type promoted by communications minister Lord Carter and Ed Richards, ofcom's chief executive, to boost Britain's digital economy, has exacerbated the problem. "They got very keen on a statistic that said they were the fastest in the world, without considering the consequences," said Janice Hughes, a director at Spectrum Value Partners.[36]

1.3.1 Global Problems with Internet Piracy

As the music industry enters the era of electronic commerce, most artists and record companies are set up to deliver recordings legitimately online. In fact, many of them have already begun offering only music through the internet. Just as in the world of CDs, they need protection from piracy, which otherwise undermines their basic right to authorise the use of their creative works, and cuts out their profit.

It is hard to keep track of how much revenue the media companies have lost

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[36] 'South Korea fires a warning shot to the UK over impact of superfast broadband', http://www.thesundaytimes.co.uk/sto/business/article158152.ece (accessed 29 March 2009).

through piracy. The international Intellectual Property Alliance (IIPA) estimates

$ 462m (£ 322) was lost in 2007 alone on American-copyrighted computer games.

In a recent report on Korea, the IIPA does not hazard a guess at the losses for

movies and music, but quotes statistics from the government's own Copyright

Protection Center that recorded a 52% increase in pirated music last year and a

312% leap in pirated movies.[37]

The International Federation of the Phonographic Industry (IFPI) has announced a global attack on music piracy with special attention being paid to individuals and companies uploading illegal MP3 files and internet service providers hosting illegal MP3 sites. Simultaneously, the IFPI launched its 'Action for Legal Music on the Internet'. The strategy incorporates a series of actions taken by allied national groups representing the recording industry. It is aimed at ridding the internet of large amounts of pirate content and paving the way for artists and record companies to deliver 'legal' music electronically across the world. This action also highlights the urgent need for countries worldwide to introduce copyright legislation to promote legitimate music delivery in the online age, and to protect creators from internet piracy.

1.3.2 Crackdown on Internet Pirates in South Korea

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[37] 'Digital revolution fast tracks piracy'.
http://www.thesundaytimes.co.uk/sto/business/article158152.ece (accessed 29 March 2009).

Figure 1.7: South Korean owners of small business in Dongdaemun market are showing illegal DVDs which they caught around their market.[38]

In Dongdaemun market, named after the Great East Gate that surrounded Seoul in the Joseon dynasty, South Korean shoppers are spoilt for choice. It is a round-the-clock throng of 30,000 stalls selling everything from clothes to electrical goods and office supplies. Locals sometimes browse while munching boiled beetle larvae, a favourite snack. There are also racks and racks of pirated DVDs on sale within days of a film's cinema release. Copyright infringement is nothing new in Korea but these days the contraband laid out on market stalls is only the tip of the iceberg.[39]

Just like Napster, KaZaA and other file-sharing systems in western countries spawned illegal file sharing worldwide, South Korea also has long had its share

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[38] Source: 'Digital revolution fast tracks piracy', http://www.thesundaytimes.co.uk/sto/business/article158152.ece (accessed 29 March 2009).
[39] 'Digital revolution fast tracks piracy', http://www.thesundaytimes.co.uk/sto/business/article158152.ece (accessed 29 March 2009).

of file-sharing services. But also, understanding digital rights and the role of content ownership in the future of digital entertainment, South Korea moved rapidly to remove what were seen as the 'parasites' of the new digital music industry. After the first battle against the biggest file-sharing service in South Korea, Bugs Music, had been won, the last of the big players in that space, Soribada (a peer-to-peer online music site) was shut down in November 2005. Meanwhile Bugs Music has turned into legitimate music seller and is now working with the cellular network carrier, LG Telecom. In addition, other digital trends have appeared in the music field. For example, the popularity of search and social networking (digital communities) are obvious in the digital music industry. In South Korea, for example, the search engine Daum has introduced many features that help users to find music, and it works closely with the music portal site, Muz.

> With speeds of more than 100 megabits a second-typically 10 times faster than Britain- it takes only two minutes to download a full-length movie in Korea. That will shrink further if plans drawn up by the Korean Communications Commission to boost speeds tenfold by 2012 come to fruition. Such ambitions will have the online pirates rubbing their hands in glee. "Asia Pacific has always had less respect for copyright laws – it's not just Korea," said media consultant Chuan Wei Lim in Hong Kong.[40]

The South Korean communications giant, SK Telecom, has admitted it finds it

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[40] 'Digital revolution fast tracks piracy'.
http://www.thesundaytimes.co.uk/sto/business/article158152.ece (accessed 29 March 2009).

hard to get customers to believe they actually need to pay to download music

when so many people can use illegal P2P programs to download files free from

the internet. A spokesperson said: "*At the moment, because of file-sharing*

programs, customers feel digital contents can be copied for free. We are in the

unenviable position of having to fight against the commonly held opinion that

only an idiot would actually pay to download music. It's no mean feat

persuading customers to think otherwise."[41] To fight back against widespread

audio piracy, the large music companies have been working on making music

files using Digital Rights Management (DRM) technology – DRM files cannot be

copied limitlessly, and indeed can only be played on certain devices. Music

producers believe DRM protects musicians' copyright, ensuring that there will

still be money to be made from making music in the future. Otherwise, without a

profit incentive, many musicians might give up on the idea of releasing music.

Altogether, another telecommunications giant, KT, thinks that most customers

are not opposed in principle to some form of copyright restriction. A

spokeswoman for them commented: "*Customers know they shouldn't be using*

illegal P2P services. We all have to respect that artists are doing a job and

customers should pay fairly for what they want to listen to. It will help music

producers to continue to make high-quality audio tracks for consumers."[42]

1.3.3 Changing Tactics

In the past, music companies would tend to chase after people who illegally

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[41] Hae-yeol Lee, 'SK telecommunication Seoul newsletter*',* (2009) p 43.
[42] Jin-ah Kim, 'KT telecommunication newsletter Seoul*',* (2009) p 87.

downloaded music, but this proved to be largely ineffective in deterring other downloaders who never thought they would be caught. So now, the music industry has changed tactics. According to Lee Deok-yo, the CEO of the Korean Association of Phonogram Producers (KAPP), the industry is fighting against rampant music piracy through an information campaign featuring pop stars like Wonder Girls and FT Island, as well as by improving technical protection for digital audio files. Technical protection measures have been used worldwide but music technology experts in South Korea have come up with a more elaborate, five-level measure for digital audio. The first level bans certain lyrics and titles so they cannot be disguised. When users however find a way of playing with the words in both the Korean and English languages, the second level kicks in, banning the line-ups or mix-ups of certain words. The third level bans particular types of files, such as MP3 or AVI files, from being downloaded, while the fourth recognizes certain hash functions, or the digital function each song and movie has as a characteristic. The final level, which is currently only carried out in South Korea, is the filtering stage, in which content production and distribution companies offer special servers that recognize the specific codes that songs have. These songs are registered to certain companies like KAPP and when a user downloads or even uploads any kind of property registered, the contents will be transmitted to the server and be confirmed as property violation. As soon as server recognizes the codes, the downloads or uploads are cut off. South Korean companies feel they have found ways to stop music piracy.

1.4 Cyber War between North Korea and South Korea

> The BBC's Lucy Williamson: "North Korea and America are in a kind of 'who blinks first' game". North Korea has said it is entering a "state of war" with South Korea in the latest escalation of rhetoric against its neighbour and the US. A statement promised "stern physical actions" against "any provocative act." North Korea has threatened attacks almost daily since it was sanctioned for a third nuclear test in February. However, few think the North would risk full-blown conflict. It has technically been at war with the South since 1953 as no peace treaty has been signed. An armistice at the end of the Korean War was never turned into a full treaty. A North Korean statement released on Saturday said: "From this time on, the North-South relations will be entering the state of war and all issues raised between the North and the South will be handled accordingly."[43]

North Korea, which has been firing missiles and spewing threats against the United States, has been identified by South Korea's main spy agency as a suspect in the cyber attacks targeting government and other Internet sites in the USA and South Korea. Attacks on South Korean data networks were up 20% last year, with hundreds of serious attempts each day, to hack in and steal defence secrets. More North Korean locations are showing up as the source of these attacks. This appears to solve the mystery about what the mysterious

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[43] 'North Korea enters 'state of war' with South', http://www.bbc.co.uk/news/world-asia-21979127 (accessed 30 March 2013). "The long-standing situation of the Korean peninsula being neither at peace nor at war is finally over." The North carried out its third nuclear test on 12 February, which led to the imposition of fresh sanctions. Over the past few weeks, there's been an ever-growing war of words between the two sides, and this latest statement in particular has made the Koreas' neighbours nervous. The jointly run Kaesong industrial park, just north of the border, is still in operation.

North Korean cyber warfare units were up to.

> The news channel quoted South Korean intelligence as saying, "Over the past year,
>
> North Korea has been suspected of involvement in ever-larger cyber attacks
>
> against South Korea, as many as 15,000 a day," adding, "At first the cyber attacks,
>
> such as the massive July 4 attack in 1999 against government sites in the U.S. and
>
> South Korea, were basic - even primitive - `denial of service` assaults." In fact,
>
> South Korea's intelligence agencies now believe that North Korea has the
>
> capability to paralyze the U.S. Pacific Command and cause extensive damage to
>
> defense networks inside the United States.[44]

A widespread computer attack that began on July 4th 2010 knocked out the Web

sites of the Treasury Department, the Secret Service and other US government

agencies, according to officials inside and outside the government. The

American targets included the White House, Pentagon, State Department,

Treasury Department, Homeland Security and National Security Agency, as

well as the New York Stock Exchange, Nasdaq stock market and The

Washington Post. North Korea celebrated America's Fourth of July

Independence Day in 2010 by launching a wide-ranging cyber assault on

websites in South Korea and the U.S., including that of the Treasury

Department and Secret Service. The attack is not only a significant escalation

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[44] 'NK has 30,000 electronic warfare specialists',
http://english.donga.com/srv/service.php3?biid=2011051977548 (accessed 19 May 2011). " The
report added, "Defectors say that the regime now culls the brightest students from the nation's
universities and funnels them into special `secret` schools that concentrate on hacking and
developing cyber warfare program." The heart of the effort is centered at Automation University,
where 100 to 110 hackers a year are trained in advanced electronic espionage every year.

by the DPRK, but a demonstration of how the USA remains vulnerable to a covert operation by a rogue state or terrorists that can be as devastating as a WMD (Weapon of mass destruction) attack.

1.4.1 The Ongoing Cyber War between North Korea and South Korea

Major Banks and TV broadcasters suffered massive computer network failures on Wednesday afternoon. It is unclear who was behind the attack. The computer networks of broadcasters KBS, MBC and YTN simultaneously failed at around 2:15 p.m. Computers suddenly shut down or froze and could not be rebooted until late afternoon. Shinhan Bank's computer network suffered the same fate. Computers at headquarters and all branches failed or had files deleted automatically, while operations ranging from banking and ATMs to online transactions ground to a halt. The government and military here are focusing on the fact that the cyber attacks came just five days after North Korea threatened revenge for two days of hacking attacks apparently suffered by the state-run Rodong Sinmun daily and Korean Central Television.[45]

The targets were all sites that could be accessed by the public, including the

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[45] 'S.Korea Hit by Massive Cyber Attack',
http://english.chosun.com/site/data/html_dir/2013/03/21/2013032100489.html (accessed 21 March 2013). . "This could be the start of a full-fledged cyber war," said one intelligence official. "Future attacks could target the government's computer network, nuclear power plants, railways and other national infrastructure." The Defense Ministry said it raised the cyber threat level, or INFOCON[45], by one notch.

presidential Blue House, the Defence Ministry and some banks. South Korea'[46]s

military command is investigating a cyber attack in which North Korean hackers

may have stolen secret defence plans outlining Seoul and Washington's

strategy in the event of war on the Korean peninsula. The highly sensitive

information, codenamed Oplan 5027, may have found its way into hostile hands

after a South Korean officer used an unsecured USB memory stick to download

it. It reportedly contained a summary of military operations involving South

Korean and US troops should North Korea[47] conduct a pre-emptive strike or

attempt to invade.

> South Korea's military is investigating a cyber attack in which North Korean
>
> hackers may have stolen secret defence plans outlining Seoul and Washington's
>
> strategy in the event of war on the Korean peninsula. According to the Chosun
>
> Ilbo,[48] a South Korean newspaper, the document outlines troop deployments, a list
>
> of North Korean targets, amphibious landing scenarios and how to establish a
>
> post-war occupation. The Yonhap news agency said the plan allowed for the
>
> deployment of 700,000 US troops in the event of a full-scale war. Embarrassed
>
> officials in Seoul attempted to play down its importance.[49]

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[46] http://www.theguardian.com/world/south-korea.
[47] http://www.theguardian.com/world/north-korea.
[48] 'N.Korea 'Hacks into S.Korea-U.S. Defense Plans'', http://english.chosun.com/site/data/html_dir/2009/12/18/2009121800317.html (accessed 10 December 2009).
[49] 'North Korean hackers may have stolen US war plans', http://www.guardian.co.uk/world/2009/dec/18/north-south-korea-hackers (accessed 18 December 2009). The document was not a full text of the plans, said the defence ministry spokesman Won Tae-jae, adding that the 11-page file was intended simply to brief military officials and did not contain sensitive information. The investigation has yet to establish how the hackers were able to get in or whether they were acting with North Korean support. One theory is that they used an internet protocol address registered in China, a preferred route for North

The DSC carried out sweeping security checks after the Monthly Chosun reported in November 2009 that the military Internet network had been breached by a North Korean hacking unit, and that in the process the agency confirmed that OPLAN 5027 had been hacked. The monthly in November 2009 reported that North Korean hackers stole information from the Chemical Accidents Response Information System built by the National Institute of Environmental Research under the Ministry of Environment after infiltrating the Third Army headquarters' computer network and using a password to access CARIS's Centre for Chemical Safety Management.

Hackers have attacked about 40 South Korean government and private websites, prompting officials to warn of a substantial threat to the country's computers. The country's National Cyber Security Centre said it had seen signs of a "denial-of-service" attack, in which large numbers of computers try to connect to a site at the same time in an attempt to overwhelm the server. A South Korean cyber security company, AhnLab, said in a statement the targets included websites belonging to South Korea's presidential office, the foreign ministry, the national intelligence service, US Forces Korea and major financial institutions.[50]

Koreans attempting to hack into files on foreign networks.

[50] 'South Korea government websites targeted in cyber attack', http://www.guardian.co.uk/world/2011/mar/04/south-korea-websites-cyber-attack (accessed 4 March 2011). South Korea's media regulation agency, the Korea Communication Commission, said no immediate damage to the websites had been reported. AhnLab found malicious software designed to attack websites and warned the targets in advance so that they could prepare. Government officials have said that previous denial-of-service attacks on South Korean government websites were traced to China.

1.4.2 The Cyber War Capabilities of North Korea

For nearly two decades, the South Korean media has been reporting on the cyber war capabilities of North Korea. All of this revolved around activity at Mirim College,[51] a North Korean school that, since the early-1990s, has been training, for want of a better term, teams of computer hackers. The story, as leaked by South Korean intelligence organizations, was that a hundred cyber war experts were graduated from Mirim College each year. North Korea is supposed to have, at present, a cyber war unit of nearly 1,000 skilled hackers and Internet technicians. South Korean intelligence also believes the North Korean have a unit of at least 100 very good hackers who have been ordered to scout out the South Korean government and military networks. But there's more.

> Faced with the military might of the world's only superpower, North Korea appears
>
> to believe it can at least gain an advantage in cyberspace. It is thought to have
>
> been responsible for high-profile cyber attacks in July that caused web outages at
>
> the White House and its South Korean equivalent, the Blue House. Reports in
>
> South Korea said investigators had traced the Chinese IP address used in those
>
> attacks to North Korea's post and telecommunications ministry. The communist
>
> state is believed to operate an internet warfare unit, staffed by between 500 and
>
> 1,000 people, that attempts to hack into US and South Korean military networks in
>
> search of classified information or to throw government institutions into chaos.[52]

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[51] 'Information Warfare: North Korea Builds An Operating System', http://www.strategypage.com/htmw/htiw/articles/20100311.aspx (accessed 15 March 2010).
[52] 'North Korean hackers may have stolen US war plans',

In 1997, North Korea established Moranbong University to produce even more elite Internet espionage experts. This school is small, accepting only 30 students[53] each year for a five-year program of computer and military subjects. It was long thought that it was more likely that those Mirim College grads were hard at work maintaining the government intranet, not plotting cyber war against the south. Moreover, North Korea has been providing programming services to South Korean firms: not a lot, but the work is seen as competent and cheap. So there is clearly some software engineering capability north of the Demilitarised Zone.

> North Korean leader Kim Jong-un in February expressed confidence in the regime's cyber warfare capabilities against South Korea. A South Korean official on Sunday quoted Kim as saying at the time, "If we have strong information technology and brave warriors like the Reconnaissance General Bureau, we will be able to break any sanctions and have no problem building a strong and prosperous country." The official said the North has reason to be confident in its 12,000 highly skilled hackers, who are able to avoid detection by erasing their traces. Talented children in sciences in North Korea get intensive computer training at Kumsong Middle School in Pyongyang.[54]

http://www.guardian.co.uk/world/2009/dec/18/north-south-korea-hackers (accessed 18 December 2009). The revelation that such sensitive information may have fallen into North Korean hands has provoked outrage in sections of the South Korean media."If North Korean hackers can infiltrate the south's cyber borders at will, then all of those troops and weapons protecting the country along the border are useless," it said."
[53] 'Information Warfare: North Korea Builds An Operating System', http://www.strategypage.com/htmw/htiw/articles/20100311.aspx (accessed 15 March 2010).
[54] 'N.Korea 'Confident' in Cyber Warfare Capabilities', http://english.chosun.com/site/data/html_dir/2013/04/08/2013040801313.html (accessed 8 April

Today there is the growing evidence of North Korean hackers at work. The

mystery angle is paradoxically only revealed when one tries to find any

incidents of North Korean hackers actually, doing anything. That could be

construed as particularly ominous, for only the most elite hackers can do

their work without leaving behind any tracks or evidence. Some observers

have maintained that, because North Korea's Internet connections come

from China, the North Korean cyber warriors could be cleverly

masquerading as Chinese hackers.

OVERALL CYBER WAR STRENGTH

Nation	Cyber Offense	Cyber Dependence	Cyber Defense	Total
US	8	2	1	11
Russia	7	5	4	16
China	5	4	6	15
Iran	4	5	3	12
North Korea	2	9	7	18

Figure 1.8: Overall Cyber War Strength.[55]

However, after a decade, there are now emerging some visible signs of North

Korean hacking. The North Korean hackers are no longer able to wander

around the net without leaving some signs. While North Korea has produced

2013). They are then raised as "cyber warriors" for three to five years at either Mirim College under the General Staff Department or Moranbong College under the Reconnaissance Bureau. An estimated 1,000 North Korean hackers work under cover for educational software companies, animation companies and trade firms across China, Southeast Asia, and Europe.
[55] Source: 'U.S. Cyber War Strength is Outclassed by North Korea, Iran, China, and Russia (to Name a Few)', http://www.buzzfeed.com/alexandran13/20-things-theyre-not-telling-you-about-the-future-gdih (accessed 4 December 2013).

some competent engineers, they don't produce super-scientists, or people capable of the kind of innovation that would enable North Korean cyber warriors to remain undetected all these years. So it is the case that North Korean cyber warriors apparently do exist, and are not the creation of South Korean intelligence agencies trying to obtain more money to upgrade government Information War defences.

> The army has teamed up with Korea University to open in 2012 the new cyber-defence school, which will admit 30 students a year for a four-year course. Courses include how to break malicious internet codes, ways to psychologically prepare for cyber warfare and other IT technologies to guard against potential attacks, an army spokesperson said. "We ... seek to nurture warriors to fight in cyber warfare amid growing cyber-terror threats from North Korea and to secure a stable supply of specialists," the army said in a statement.[56]

North Korea clearly has a unit devoted to Internet based warfare. We know that North Korea has a lot of military units that are competent, in the same way robots are. The North Koreans picked this technique up from their Soviet teachers[57] back in the 1950s, as North Korea is something of a museum of Stalinist techniques. But it's doubtful that their Internet experts are flexible and innovative enough to be a major threat. South Korea has to be wary because it

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[56] 'South Korea to open cyber warfare school', http://mg.co.za/article/ (accessed 29 June 2011). The military will pay tuition for the students who upon graduation will become army officers required to work in online warfare-related units for the following seven years, the spokesperson said. Seoul also accused Pyongyang of staging cyber attacks on websites of major South Korean government agencies and financial institutions in March this year and in July 2009.
[57] 'Information Warfare: North Korea Builds An Operating System', http://www.strategypage.com/htmw/htiw/articles/20100311.aspx (accessed 15 March 2010).

has become more dependent on the web than any other on the planet, with the exception of the United States. As in the past, if North Korea is to start any new kind of mischief, they will try it out on South Korea first. While many of the recent attacks were more annoying than anything else, they revealed that there's a real threat out there, like creating its own operating system, to prepare for cyber warfare.

> The Seoul Central Prosecutors' Office on Sunday charged two South Koreans with cooperating with North Korean hackers in China to run illegal websites and steal the personal information of millions of individuals. Investigators discovered the personal data of 140 million South Koreans on their computers and believe they could have shared the information with North Korea. Among the data some 1000 were found to be obtained from a North Korean agent and a hacker in 2011."The data were obtained by hacking into the websites of department stores, gas stations and online shopping malls as well as from illegal dealers," a prosecution spokesman said. "If this information was passed on to North Korea, the North has a significant amount of personal information about South Korean individuals."[58]

One study[59] says that the North Korean government has a total force of 12,000 for cyber warfare with an annual budget of $56 million. North Korea was given a

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[58] 'Millions of S.Korean IDs Leaked to N.Korea', http://english.chosun.com/site/data/html_dir/2013/04/08/2013040800970.html (accessed 8 April 2013). Choi also had administrator access to around 68,000 South Korean Internet sites and used it to post ads luring users to pornographic websites. North Korea has used such information to conduct cyber attacks or to post messages on South Korean websites attempting to split public opinion here.
[59] 'North Korea Poised for Cyber Salvo', http://defensetech.org/2009/04/20/north-korea-poised-for-cyber-salvo/ (accessed 20 April 2009).

ranking of eighth place among all countries with such capabilities. The North

Korean offensive began after Lab 110, a group of top hackers working for the

military, were given[60] instructions to "destroy" the communication infrastructure

of South Korea. One government agency and security firm monitoring the

attacks says that more are on the way, and that the next wave would target

personal computers and may involve the erasing of hard drives. The attacks

represent only a fraction of North Korea's total cyber warfare capabilities. A

military study in 2006 concluded[61] that North Korea's hackers could shut down

the Pacific Command and cause significant damage to mainland computer

networks.

Having used this chapter to look at the highly digitised nature of South Korea,

what has emerged is that ultra-digital environment of South Korea can be seen

as the world-leader. Youth digital culture is being used as the liberating

mechanism for modern technologies. Widespread immersion in virtual worlds is

creating new forms of occupation of interior space. Mobility and the use of

ubiquitous technology have produced the endless territory of the city. The highly

digitised nature of South Korea has become all-pervasive in all areas of its

cultural life, including of course architecture and urbanism. One needs to get

this point fully into one's mind to understand the basis for its culture, and how

therefore architecture and urbanism might develop in future. Digitalisation is the

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[60] 'Report: N. Korean Hackers Ordered to 'Destroy' S. Korean Computer Networks',
http://www.foxnews.com/story/2009/07/11/report-n-korean-hackers-ordered-to-destroy-s-korean-computer-networks/ (accessed 11 July 2009).
[61] 'N.Korea's Powerful Hacker Army',
http://english.chosun.com/site/data/html_dir/2009/07/10/2009071000588.html?FORM=ZZNR3
(accessed 10 July 2009).

source of the immense progress that can be seen in South Korea over recent decades and is the result of intensifying cultural flows through the power of information. Digitalisation is hence able to affect cities, landscapes and buildings, and relate contemporary Korean architectural production as new models within the international context. But the corresponding potential weakness of attack prevails from across the Demilitarized Zone in the form of North Korea. Being online so much is what makes South Korea so extremely vulnerable to cyber attack. Korea is thus, as noted, the home to the first-ever full-scale cyber war. With that sobering thought in mind, it is now time to look in more detail at one aspect of this ultra-digitised condition, the Korean music industry.

Chapter 2: The South Korean Music Industry

Having looked in the previous chapter at the prevalence of digital culture, this chapter will look in depth at the South Korean music industry. The Korean music industry is a major aspect of the highly digitised nature of South Korea, and in many ways it is also now the most symbolic due to the success of 'Gangham Style' and other Korean trends that have gone worldwide. The music industry is also one of the country's major economic engines and as a symbol of its contemporary cultural condition, in that it shows the way in which crowd-driven popular culture has become so prominent in everyday life. Again, one needs to understand such conditions if one hopes to reach the point of being able to rethink Korean architecture and urbanism.

2.1 The South Korean Music Industry

Many in the IT industry and global business press have become excited about the success of the Apple iPod and its iTunes music service. The iPod was famously launched in the last quarter of 2001. What is less well celebrated is that two years later, in the summer of 2003, full-track music downloads were introduced for mobile phones, not as ringing tones, but as full songs, in MP3 format. Since then, the MP3 digital file has emerged as a new digital paradigm for the music industry. The appearance of the digital MP3 file has developed the music environment rapidly and changed the ways of listening to music.

Processes of digitalization such as through the internet and mobile phones have shocked the music industry. The traditional record music industry has correspondingly been declining progressively due to this 'shock' of digitalization. A new online music market has emerged and the digital sound service market has exploded. The appearance of the MP3 was also the turning point which indicated the movement shift from offline to online music business. In order to play MP3 files, different kinds of music MP3 players and mobile phones capable of playing these files were invented. In turn, the new devices have provided the consumer with a freedom of listening to music in terms of accessibility which other products could not provide. Consumers are capable of listening to music regardless of the limits of time and space. As we are able to enjoy music anytime and anywhere music is truly absorbed into our daily lives. This innovation happened first in South Korea and largely through mobile phones. In just two years from 2005, music sold to mobile phones worldwide exceeded the dollar value of music sold to iTunes. By the summer of 2006, music phones were outselling iPods at a ratio of 6-to-1 and even Apple saw the writing on the wall by announcing the launch of the iPhone in January 2007. Yet while it proved a huge innovation for the music industry, the sale of MP3 music to mobile phones is only the tip of the iceberg for the digital music experience in South Korea. Although elsewhere a key symbol of globalization the sale of iPod products are just 2% of all music purchases in South Korea. In contrast, the rival, the IRiver Korean Mp3 player, made with Korean technology, is extremely popular in that country.

Figure 2.1: iRiver vs iPod.MP3 Market in US and Korea.

2.1.1 Analysis of the Music Industry Structure

The scope of the South Korean music industry includes musical, performance, musical composition, publication and incidental music used in broadcasting, advertisements and movies, as well as the value of artists activities concerning in producing music. In the past the general concept of the music industry system was that of producing records and distributing them. Since the digitalization of records and online distribution is now possible, the territory of the present music industry has been expanded to incorporate streaming, downloading, wireless services and the BGM service mainly used by portal internet sites. Hence the music industry is moving from the existing offline

business in which record companies are oriented towards wholesale and retail businesses, to an online digital music industry based on digital sounds, artist's digital record sales and other proceeds created by the development of new distribution routes. This creates a new value-chain around the complete service channel POC (Point of Contact) which includes digital sounds and services. Streaming, downloading, and BGM types, plus the various devices whereby mobile phones, MP3 players and PMP were capable of listening to digital music files have been developing very rapidly in the digital music industry since 2000. However, more recently the rapid growth of the digital music industry has slowed because the number of devices has reached saturation point, and new service models have not performed well after colouring and ringtone services first appeared in 2006. Thus the high-speed internet penetration rate has reversed the circumstances of the existing record industry, changing value system completely. It was the turning point that a further change was demanded in 2007 in an attempt to stop the rampant illegal downloading of digital music. Responding to demand, the Korean communication company, SK Telecom created the Music License Bank (MLB) and another company, KTF, built Digital License Management (DLM). Through these, the market was able to be fair and the market environment became stable again. However, due to the growth in the illegal market and problems with the music industry structure in terms of copyright dispute and piracy, there was a huge call for even more reform of the music industry to create greater trust over digital contents.

The consumption of digital content has increased through a combination of user

devices and the internet with its new interactive functionality. The rapid

acceleration of this convergence progress has seen the music content

environment increase greatly. Considering there has been a constant campaign

for legalization of the illegal content markets, and the start of the 'Non-DRM'

service, it remains the biggest issue for the music industry that cooperation and

competition are required between sound controllers and service entrepreneurs,

and between mobile communication companies and device manufactures, if the

problem is ever to be tackled properly.

Music industry paradigm shift

| 1)the speeding up digitalization after 2002 off-line music industry falls. Music industry changes to online digital music industry. | 2) down in the price of MIDI (musical instrument digital interface) sound sources. | 3)big shift from illegal market to legal download music market. | 4)large corporations such as SKT(telecommunications technologies company) has strong market power. | 5)SKT expands value chain of music industry, a distribution sector+ a manufacture sector+ a planning & coordination sector. | 6) a large corporation such as CJ(media company) tries becoming the best total music business with the allied enterprises for synergy effects. |

Music industry structure

| 1.content producers: according to online tendency: they develop new business model and try improving commission profit through disputing with telecommunication technologies company. | 2.the distribution industry: online distribution sectors make a record plan,buy contents and partial productions with contents producers. | 3.broadcasting station: major national broadcasting station support content and additional business. specialized music cable broadcasting station pursue unique'total music sevice'. | 4. wireless telecommunication: technologies company:mobile phone companies try expanding ARPU(Average Revenue Per User) and content sector to increase profit. |
| 5.cable communication company: they provide music sevice and intensify content business with IPTV, WiBro(Wireless Broadband) technology. | 6.music portal company: bugs and M-net provide various sevices such as VOD(video on demand) streaming services. | 7.general portal company: they invent new music business with central point of BGM (Background Music) downloads. | 8.end comsumer: end consumers have positive reactions about paying for download services and constant use. |

Music Industry main issues

| 1)dispute of a sound source right between a rightful claimant of a sound source and telecommunications technologies company. | 2)appearance of new technology and new service provider. | 3) growth of UCC (user-created content). | 4)tendency towards teenage taste music such as dance music and korean ballad music. |

Figure 2.2: Music industry paradigm shift, structure, main issues.[62]

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[62] Source: Kung-mo An, *Music Industry Book 2010* (Seoul: Korea creative content agency, 2011) p 40.

2.1.2 Range of the South Korean Music Industry

The range of music industry now has far extended the former narrow range of record-oriented music industry to wide coverage of the music industry, including the digital music industry which has been developing very rapidly since 2000. The notion of the current expanded music industry reflects changed circumstances. The present music industry includes existing music record industry production, the new digital music industry, and the ongoing music performance industry. In other words, the music industry is subdivided into music production business making plans and manufacturing music, the record wholesale and retail business, the online music service business that digital music work in a central role, mobile music service business, a sound source agency business, etc. then the music performance industry is subdivided into planning, production, ticket sale of music performance, and the *noraebang*[63] business, whereby music is created for mass collective singing, as will be discussed in Chapter 3.

2.2 The Digital Music Industry in South Korea

The digital music industry has been developing continuously since 2000 but this speed of development has slowed down since 2006. The change of consumer behaviour towards how they use music is the most important factor in the digital

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[63] Korea's *noraebang* (literally meaning 'singing room') refers to a place for singing, and will be discussed in Chapter 3.

music industry. The growth of the paid-for music market has slowed despite the companies' endeavour to change the illegal music market over to the paid-for music market, because illegal markets clearly still exist. Even though the expansion of digital infrastructure provided consumers with the paradigm for the new type of music, it has also driven the rapid growth of illegal markets because it has accelerated the sharing of digital information based on social networks. The expansion of the digital music industry has likewise driven the wireless internet market in South Korea and expanded its territory. The detailed information about the digital music industry is largely about the mobile music service business, online music service business, the sound agents business, and the mobile online sound production and manufacturing business. By comparison with 2009, the mobile music service business in 2010 fell by 9%, whereas the music service business in 2007 increased by 87% in the same year and was the biggest growth area. The sound agents business had in 2007 increased by 20%, whereas the mobile online sound production and manufacturing business in 2007 remained at a steady rate.[64]

2.2.1 Digital Music Innovation in South Korea

Rather than to try to resist customer preferences and demand in fostering innovation, the South Korean IT and telecoms industry is eager to supply all the services that their customers want. Thus firms are very happy to provide a full range of ring-tones and the other multitude of variants to them. Today, the

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[64] Kung-mo An, *Music Industry Book 2008* (Seoul: Korea creative content agency, 2009) p 35.

National Internet Development Agency (NIDA) of South Korea reports that ring-tones are used by 97% of South Korean mobile phone owners, so virtually the whole population buys ring-tones. Younger people are attracted to pop songs that are in the charts, and will replace their ring-tones much more frequently than the older sections of the population, but there is no denying the widespread appeal of music on the phone in South Korea. An interesting twist on the ring-tone is the waiting-tone. This extremely simple service concept was developed by WiderThan in South Korea, and the first commercial service was called Color Ring. The worldwide telecoms technical term, somewhat confusing, is called the ring-back tone. The service however does not "call back" the missed calls, and so waiting-tone makes a lot more sense to describe it. Exactly like with ring-tones, the subscriber purchases the song he wants, and also like ring-tones, the subscriber can change the song later on. However, of course the subscriber also pays a monthly fee, and very significantly as this is a core network solution, there is no competition for service providers. The service is not dependent on the types or abilities of the handsets and much higher quality music can be delivered as these waiting-tones. All the money raised is then divided between the telecoms operator and the music industry.

Just eight months after its launch, SK Telecom was earning more from waiting-tones than from ring-tones. In a year over a third of its subscriber base was using the new service. Both of its main domestic rivals, LG Telecom and KTF, have launched their own waiting-tones service. In South Korea alone the service is delivered over ₤100,000,000 in its first full year. Then as the 'secret'

was let out, waiting-tones were rapidly launched in Taiwan, China, Israel, Singapore and Japan, with Europe and America following later. Most of their countries report strong waiting-tones sales and soon revenues everywhere from waiting-tones exceed that of ring-tones, following the South Korean lead. Worldwide by 2006 the sales of waiting-tones had generated over a billion pounds of revenue. Meanwhile the WiderThan service was bought up by Real Networks to boost their know-how in the mobile and converged music service area.

In June 2003, as a trial, the Sony Music recording artist Ricky Martin pre-released several tracks from his newest album as MP3 files sold directly to mobile phone owners six days before the actual CD album was released. Given that only South Korea had sufficient penetration of suitable music-playing mobile phones at the time, this trial was limited only to South Korea. In six days Ricky Martin had sold over 100,000 songs. Since then music consumption in this manner has grown explosively. Two years later, by September 2005, 45% of all South Korean mobile phone owners had downloaded full-track MP3 songs to their mobile phones, as reported by NIDA.[65] In contrast, even five years after its launch in America, the total level of Apple iPod penetration was about 15% of the population, and the users of iTunes downloads was also obviously less than the total base of iPod users, since the majority of iPod music was transferred

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[65] The National Internet Development Agency of Korea (NIDA) is part of the South Korean Ministry of Information and Communication sub-organization dealing with the allocation and maintenance of South Korea's IPv4/IPv6 address space (and the related WHOIS information). The organization was created in 2004 pursuant to Article 9 of the Act on Internet Address Resources (passed on July 30, 2004), and subsumed the Korea Network Information Center, previously a non-profit organization founded in 1999.

from music CD collections rather than downloaded from iTunes music store (Apple tellingly does not provide the exact breakdown). By the summer of 2005 even for the smallest of the three mobile operators in South Korea, LG Telecom, some 5.5 million songs were being downloaded every month, generating £10,000,000 of revenue just on that service alone each month (annually this works out to 66 million songs and £120,000,000 of revenue in South Korea). Again, in contrast, Apple and its iTunes service sold only 31 million tracks worldwide in its first 24 months, a quarter of the Korean rate. Songs as MP3 files are reasonably priced in South Korea, and nothing like the £1.65 price on some networks in countries like the USA. A single MP3 full-track download of a South Korean artist to a mobile phone typically costs about US45 cents per song, and MP3 full-track downloads by a Western artist costs about 50p to download directly to one's phone in South Korea. In other words, it is only about one-third or one-half of the price in western countries.

2.2.2 The Impact of the Internet on the Digital Music Industry

The internet has brought about fundamental changes not only in our daily lives but also in the corporate and industrial structures of advanced capitalism. For example, multinational corporations are now able to disperse their functions in global network form. Their production and software design functions can be outsourced around the globe. In short, the internet's impact has allowed a flatter organizational structure for international companies. For another, it has enabled

consumers to become active "prosumers"[66] through the Web 2.0 trend of sharing and participation. Indeed, these changes have completely transformed the ways that global companies do business at all levels of their operations from service planning to production to distribution.

The internet has likewise changed the entire landscape of industrial competition. For example, in terms of the digital music industry, not only existing media companies but also those involved in chipsets, software devices and other communications are in fierce competition over their market share. Furthermore, alliances among heterogeneous companies are unfolding in many ways, and such changes have intensified with the advent of mobile broadband. As personalization and mobility – the advantages of mobile phones – become more integrated into the existing wired internet, it has now become far easier for companies to determine consumer needs and offer customized services. Moreover, mobile broadband gives consumers the freedom to access content anytime and anywhere, enhancing cross-device connectivity like 3-screen play. Although currently such changes are mostly entertainment-related, they are expected to spread soon throughout the whole digital industry as consumers and service providers accumulate more experience with principles of convergence.

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[66] 'Prosumer' is general term formed by contracting either the word professional or producer with the word consumer. The term has taken on multiple conflicting meanings: the business sector sees the 'prosumer' (professional–consumer) as a market segment, whereas economists see the 'prosumer' (producer–consumer) as having greater independence from the mainstream economy. It can also be thought of as converse to the consumer with a passive role, denoting an active role as the individual gets more involved in the process.

2.2.3 New Innovation for Digital Music

DIGITAL

8% of British cellphones were 3G in june 2006-source:informa 2006
39% of South Korean cellphones 3G by june 2006-source inorma 2006

4% of Americans listened to MP3 songs on their mobile phones in 2005
26% of south Koreans listened to MP3 songs on their mobile phones in 2005

11% of Americans use Email on cellphone-source;m'Metrics March 2006
21% of South Koreans use eMail on cellphone-source:Nida September 2005

European youth replace cellphones every 21 months-source Telephia Q1 2006
South Korean youth replace phones every 11months-source NIDA Sept 2005

2006 in the USA 10% of music sales was digital-source:IFPI January 2007
2006 in South Korea 57% of music sales was digital-source:IFPIjanuary2007

19% of Americans use cellphone based internet-source comScore October 2006
43% of South Koreans use cellphone based internet-source nida septmber 2005

99% of phones sold in South Korea in 2005 were cameraphones- source:mic 2006
20% of South Korean DMB cellphone owners watch digital TV in car-source:ordeto January 2007
40% of South Koreans have created an avatar-source:neowiz 2006

14% of British cellphone owners buy MP3 music-source:telephia January 2007
45% of South Koreans buy MP3 Koreans buy MP3 files to phones-source nida septmber 2005
23 million South Koreans, 46% of the total population make payments using one of the five cellphones
mobile payment systems-source: business week 2 march 2006

21% of American population have set up a personal profile in MySpace-source:my space 2006
43% of South Korean population have set up a personal profile in Cyworld-source Cyworld 2006

Value of virtual property sold in South Korean MMOGs for real cash in 2006:$830 million-
source:Korea Game development and promotion institute.

By 2005 there was a separate broadband connection for 18% of the American population-source itu2006
By 2005 there was a separate broadband connection for 51% of the South Korean population-source :itu 2006

3% of british cellphone owners have downloaded video to the phone-source telephia January 2007
12% of South Korean cellphone owners have downloaded video to the phone-source nida September 2005

Figure 2.3: Digital Korea. Source: itu 2006-2007.

The music industry is rapidly experiencing innovation in all parts of the world, from the USA (iTunes) to Finland (ring-tones), but more than half of all these digital innovations have come out of South Korea. This is because of the high penetration of broadband and 3G mobile phones, as well as a vibrant domestic music industry which is suddenly discovering a big demand abroad for its artists. South Korea offers an optimal incubation 'laboratory' for new innovation in digital music. Some of the developments currently being explored in South Korea include the sale and delivery of music over the DMB broadcast technology and/or with the main networks, for digital radio available over broadband internet (similar to IPTV on the television side), or various multimedia adaptations to mobile phones in, for example, playing the music you have selected on the phone of the person you are calling – a sort of musical 'gift'. The South Korean digital music industry can be seen a big eco-system with dozens of companies all collaborating to build this new industry. They include big players like Soundbuzz, which is already active in thirteen Asian countries, or Cowon with its JetAudio music platform, or Reigncom which makes the iRiver MP3 player. But there are also many other companies that are innovating in the music industry space, such as Navermusic, 52street, Beatbox, IlikePop, Bugs, Dosirak, Funcake, Jukeon, MaxMP3, Mukebox, Musicon, Muz, Mylisten, OIMusic, Tubemusic, SM Entertainment and Wavaa. The average amount of daily consumption of DMB[67] digital TV on mobile phones in South

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[67] Digital Multimedia Broadcasting (DMB) is a digital radio transmission technology developed by South Korea as part of the national IT project for sending multimedia such as TV, radio and datacasting to mobile devices such as mobile phones. This technology, sometimes known as mobile TV, should not be confused with Digital Audio Broadcasting which was developed as a

Korea was 129 minutes per day in January 2007,[68] and if anything has grown since.

2.2.4 Korean Mobile Phone Music Industry

In South Korea, teenagers will replace their phones every eleven months according to the latest figures by NIDA, whereas the global average replacement cycle is almost twice that, at 18 months. This helps to show just how strongly South Korean young people value their mobile phones. The music opportunities in 'Digital Korea' are enormous. To understand the importance of music, 85% of South Koreans own an MP3 player, but of those, some 57% in fact consider the music phone as their primary device for the consumption of music. Nearly 80% of mobile phones sold in South Korea have had integrated music players since 2007. The Korean mobile music industry goes way beyond just downloading songs. SK Telecom states that almost 45 percent of their subscribers have signed up to their "colouring" service, which makes SK telecom over £5,000,000,000 a year. SK telecom also estimates that wireless internet and mobile data services make up around 40% of their total revenue. The introduction of flat- rate music file downloads is revolutionary, though, and it has proved to be an attractive one for customers. For only a relatively small fee, now people are able to get as much music content on their mobiles as they like.

research project for the European Union. DMB was originally developed in South Korea as the next generation digital technology to replace the FM radio. The world's first official mobile TV service started in South Korea in May 2005, although some trials were available to consumers much earlier.

[68] Source: the South Korean Ministry of Information and Communication.

Other countries have quickly sat up and taken notice of the groundbreaking new download services offered by South Korean mobile networks. Both SK telecom's Melon and KT's Dosilak service allow users to subscribe to an unlimited MP3 downloads sight by paying a flat monthly fee. The foreign media have also been impressed by Korea's mobile downloading services. The American magazine, *BusinessWeek*, called SK telecom's Melon service the 'the iPod killer', predicting that this kind of service would eliminate the need for people to carry music players and mobile phones that actually store MP3 tracks on them. Instead all music can be dialled up and played at will.

The extent of how far music can be enjoyed on the mobile phone is not limited to replicating what is possible already on CD or DVD. Now you can also view live concerts on 3G phones – and in South Korea already more than half of all phones were 3G by 2006. You can dance while wearing your stand-alone MP3 player, although of course that particular MP3 player cannot teach you to dance. However, since it was launched in South Korea, the virtual dance tutor is available on the phone in many countries. Select your favourite song, set the appropriate tempo, and a stick figure on the screen will guide you through the steps. As you learn your dance moves, you speed up the tempo. The virtual dance tutor has been available on South Korean mobile phones for three years already. Rihanna, the Barbadian American hip-hop artist, was one of the first western artists to adopt this idea in 2006. Thousands of clips on YouTube validate the results of this concept. The British pop trio, Sugababes, was among the first Western bands to invite its fans to submit videos of their dance moves

that the Sugababes would then perform in their stage act during their 2006 international tour. Cyworld in South Korea actually attracts more video uploads than YouTube even though South Korea has only one sixth of the population of the United States. All this is due to the market penetration of the 3G cameraphones.

2.2.5 The Phenomenon of User-generated Content

Young people in Korea today fully believe in the old slogan "I want my MTV." Imagine now the iPod generation, for whom MTV already was the preferred choice over radio. But now given the option of only listening to music, or else listening to and seeing the music, then of course the music video always wins out. Now music videos can be there always with the listener. Music videos on mobile phones seem to be the inevitable future for music. If given the option of buying a digital song, or buying the same song along with its video, the most of the post-MTV generation will apt to buy the video, and clearly are willing to pay a little bit more for it. It is no surprise that in South Korea, music videos have already become a staple of the music market for youngsters on mobile phones.

2.2.6 Melon Music

While iTunes is the best-known online music service in the world, Melon, as provided by the South Korean digital services innovator WiderThan, is arguably the most advanced music service anywhere. Melon was the first fully

convergent music portal service for both broadband internet users and those with music-playing 3G mobile phones. Melon features over-the-air music downloads, real-time music listening, and the whole service is available on mobile phones, personal computers and stand-alone MP3 players. It is a truly integrated music service. Being part of the biggest South Korean wireless carrier, SK Telecom, Melon Music also reaches the largest share of South Korean music-consuming customers. Recently Melon announced a partnership with Intel's Vive digital home platform to give its users access to TV content as well. As Melon had 4.2 million members by the summer of 2010, out of SK Telecom's total subscriber base of 19 million, this means that 21% of its subscribers have always signed up for Melon Music. Or to put it another way, out of SK Telecom's world-leading proportion of its subscribers on 3G, four out of every ten 3G subscribers have taken up the Melon Music service. Melon Music offers purpose-bought MP3 files, of course, but more than that it also has a flat-rate option for consuming unlimited music and paying only a monthly fee. Out of its 4.2 million consumers in 2010 about 600,000 were on the subscription plan. Melon music earned ₤30,000,000 in 2009 and was on target for ₤50,000,000 in revenues from its various music services for the year of 2010.

2.3 Korean Wave

Egyptian aficionados of Korean pop culture are a dedicated group, eager to have their Korean pop dreams fulfilled and embraced by the community at large.

Whether it's through films, music, books or food, the 'Korean wave' has definitely

hit Cairo, and is doing so with much fervor.[69]

Steven Viney, Al-Masry Al-Youm, July 19, 2011

Over the past decade, South Korea, with a population of around 50 million, has

become the Hollywood of the East, churning out entertainment that is coveted by

millions of fans stretching from Japan to Indonesia.[70]

Lara Farrar, CNN World, December 31, 2010

Hallyu—the Korean wave—is rolling over Asia with pop music, TV dramas and

movies that dazzle audiences from Tokyo and Beijing to Seattle.[71]

Lance Dickie, The Seattle Times, June 4, 2006

The booming South Korean presence on television and in the movies has led

Asians to buy up South Korean goods and to travel to South Korea, traditionally not

a popular tourist destination.[72]

Norimitsu Onishi, The New York Times, June 29, 2005

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[69] 'The Korean Wave: A New Pop Culture Phenomenon', http://www.belajarkorea101.com/member/produk%20bonus/The%20KOREAN%20WAVE.html (accessed 23 June 2012).
[70] ''Korean Wave' of pop culture sweeps across Asia', http://www.cnn.com/2010/WORLD/asiapcf/12/31/korea.entertainment/index.html (accessed 14 March 2012).
[71] 'The Korean Wave', http://seattletimes.com/html/opinion/2003036091_sundaykorea04.html (accessed 4 June 2006).
[72] 'South Korea adds culture to its export power', http://www.nytimes.com/2005/06/28/world/asia/28iht-korea.html?_r=0 (accessed 10 October 2011).

Hallyu,[73] known as the 'Korean Wave', is a term coined by the Chinese press a little more than a decade ago to refer to the popularity of Korean pop culture in China. The boom started with the export of Korean television dramas (mini-series) to China in the late-1990s. Since then, South Korea has emerged as a new center for the production of transnational pop culture, exporting a range of cultural products to other Asian countries. Not long after, the trend spread to neighbouring Asian countries and Japan, such that it has now become a truly regional phenomenon. This regional success has then propelled an even more energetic circulation of Korean pop culture into other parts of the world. More recently, Korean pop culture has begun spreading from its comfort zone in Asia to more global audiences in the Middle East, Africa, Europe, and the Americas.

2.3.1 The Beginning of *Hallyu*

The Korean TV series *What is Love* had been a huge success in China. The

Chinese audience had mostly watched TV soaps from Europe, America, Hong

Kong, and Taiwan. After *What is Love*, the Chinese audience fell for Korean

dramas as if they had discovered a whole new world. In 1998, Chinese teenagers

colored their hair after the Korean idol group H.O.T. In 1999, a shopping center

selling Korean products opened in downtown Beijing. By 2003, Hyundai Motor

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[73] The Korean Wave or Korea fever refers to the significantly increased popularity of South Korean culture around the world since the 21st century, especially among the Net Generation. It is also referred to as *Hallyu* (Hangul: 한류; Hanja: 韓流; RR: *Hallyu*), from the Korean pronunciation. The term was coined in China in mid-1999 by Beijing journalists surprised by the fast-growing popularity of South Koreans and South Korean goods within China.

Beijing was turning out cars and soon becoming as big as American and European

brands in China.[74]

In June 1997, China's state-run CCTV ran the Korean drama *What is Love*. The

family drama – which cheerfully depicted the tensions and resolutions of a

husband and wife from two very different families, one liberally minded and one

conservatively minded – was the first Korean drama to be broadcast nationwide

throughout China. Chinese audiences were enthralled by the freewheeling

attitudes, the likes of which they had never seen under socialism, and the

sophisticated lifestyles of modern-day Koreans. Chinese audiences found they

could also more easily relate to Korean dramas, which are largely faithful to

family centred Confucian values, than *What is Love* they could to Western

dramas, in which individualist values are stronger. At its peak, *What is Love*

recorded a 15% audience share in China, at the time the second highest-ever

rating for a foreign program, heightening Chinese interest in Korean dramas. *A

Wish Upon a Star*, which was broadcast in China in 1999 after becoming a hit

with its first broadcast on Hong Kong's Phoenix TV, kept the fever for Korean

dramas going and turned actor Ahn Jae-wook into a big-time celebrity in the

Chinese-speaking world. After the success of Korean dramas, Korean singers,

too, began entering the Chinese, Hong Kong, and Taiwanese markets. The

male duo Clon and "idol groups" like H.O.T., NRG, Baby V.O.X., and S.E.S.

began to have a very strong presence on the charts in China, Taiwan, Hong

Kong and Southeast Asia. Thousands of fans flocked to their concerts, while

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[74] Qingbo Hong, *Tenth Year of Hallyu*, (Hankyoreh*, 26* November 2007)*.

local radio began covering Korean music trends. The Korean Wave provided a bridge over the mutual distrust and disinterest that had persisted between Korea and China for the half century since the Korean War. One Korean diplomat even said that Korean dramas and songs did in less than a year what diplomats could not achieve despite decades of effort.

The Korean Wave, which showed just how much one drama could change popular attitudes, continued on to sweep Japan. In 2003, NHK TV ran the Korean drama *Winter Sonata*. The result was an unprecedented cultural phenomenon in Japan. The drama, which told the tale of a man and woman tied together by the fate of first love, met a surprising response from Japanese viewers and from middle-aged women in particular. It was given several encore runs, and for its fourth run in 2005, NHK – rather extraordinarily for Japanese TV – ran it in the original Korean with Japanese subtitles to preserve the original atmosphere of the show. The leading actors of the show, including Bae Yong-joon, Choi Ji-woo, and Park Yong-ha, became huge stars in Japan. Thanks to the devoted love shown by his character in the show, Bae, in particular, became a cultural phenomenon. Earning the Japanese nickname "Yon-sama" ("Yon" from his name "Yong-joon," with the Japanese honorific "sama" added onto it), he grew as popular as the show itself. When Bae visited Japan in April 2004, about 5,000 Japanese women flooded Tokyo's Haneda Airport, bringing it to a standstill. When one episode of *Winter Sonata* was canceled to make way for a TV special on the Japanese prime minister's visit to North Korea, NHK was inundated with over 3,000 phone calls protesting against the move.

Fads come and go in Japan, but this one touches upon several deep issues in

Japanese society and its relationship with South Korea. In a society gripped by a

pervasive malaise, where uncertainty and pessimism fill magazines with headlines

about men and women who don't marry, don't have children, don't have sex, Yon-

sama seems to touch upon the Japanese nostalgia for an imagined past, and upon

middle-aged women's yearning for an emotional connection that they lack and

perhaps believe they cannot find in Japan. "I'll make great efforts so that I will be

as popular as Yon-sama and be called Jun-sama." Former Prime Minister of Japan

Junichiro Koizumi during August 2004 elections for the upper house of

Parliament.[75]

The Japanese press coined all sorts of words for it – the Yon-sama Syndrome,

the Yon-sama Social Phenomenon, the Yon-sama Religion, the Yon-sama

Disease – and at one point there were about 50 Japanese journalists in Korea

just to cover Bae. The Yon-sama Syndrome was virtually unprecedented in

Japanese society, and social critics, sociologists, and psychologists began

offering their analysis. *Winter Sonata* pulled at the heartstrings of highly

educated, middle-class women in their late 30s and older, and even the wives

of prime ministers. The pure and noble love shown by Bae in the show evoked

long-lost feelings of girlish sensitivity and nostalgia in the hearts of middle-aged

women, providing them with an escape from Japan's etiquette conscious and

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[75] 'What's Korean for 'Real Man?' Ask a Japanese Woman',
http://query.nytimes.com/gst/fullpage.html?res=9B03E4DE1130F930A15751C1A9629C8B63
(accessed 23 December 2004).

emotionally restrained social atmosphere. The Yon-sama Syndrome actually changed Japanese people's opinions about Korean people. Japanese now viewed Koreans as polite, generous, and sophisticated. One economic research institute estimated the economic impact of *Winter Sonata* at ￡5,000,000 worth in tourism to Korea and ￡1,7000,000,000 worth in DVD sales in Japan. Locations that appeared in the drama, such as Chuncheon, Namiseom Island, and Yongpyeong Ski Resort, became "Korean Wave" tourism destinations. Korean dramas are considered the first real Korean cultural export to Japan, a nation at that time generally regarded as having a more advanced media and entertainment industry. This was a major development, as previous East Asian cultural exchanges involving Japan had been virtually one-way. The breakthrough of Korean dramas, however, ushered in a period of more balanced media and entertainment exchange in East Asia.

The drama *Dae Jang Geum* provided a further opportunity for Korean dramas, which had garnered popularity in China, Japan, and Southeast Asia, to expand beyond Asia to television markets in other continents. *Dae Jang Geum,* also known as *Jewel in the Palace*, depicted the ups-and-downs of an orphaned girl who becomes the king's chief physician. Based on a real historical figure, it takes place against the backdrop of 16th-century *Joseon* Korea. In its first run in Korea in September 2003, the program enjoyed an audience share of 57%, the highest ever for a Korean drama. The beautiful clothing of the *Joseon* royal court, the restorations of *Joseon* architecture, and the colorful palace cuisine sparked global interest in Korean traditional culture. The information on Korean

traditional medicine satisfied the global trend toward a healthy living. After first airing in Taiwan in 2004, the drama enjoyed high ratings in Hong Kong and China, touching off a "*Dae Jang Geum* Fever" in the Chinese-speaking world. In Hong Kong, the show even beat out the ratings challenge of the 2003 football match between Hong Kong and Spain.

Streets became empty whereas the show ran, and newspapers would make colloquial references to the '*Jang Geum* spirit' and philosophy. Meanwhile, Korean food and Korean products enjoyed unprecedented popularity in these countries. The editor of a Chinese monthly pointed out that Korean food had become a hot item in China, a veritable miracle in a country that takes pride in being a culinary superpower. This "miracle" then replicated itself in Iran. The country's state-run TV Channel 2 began broadcasting *Dae Jang Geum* under the title *Jewel in the Palace*. It recorded truly impressive ratings of 86% nationwide, and more than 90% in the capital of Tehran. The *Chosun Ilbo*, a Korean daily newspaper, reported that thanks to the program, Iranians had grown more favorable in their attitudes toward Koreans. When Iranians saw people who appeared to be Korean on the street, the paper reported they would suddenly approach them, shake their hands, and say, "Yang Gom (the Iranian pronunciation of the drama's title character, Jang Geum), kaili khube (very good)!" In November 2011, about 100 high-ranking Iranian government officials, including officials from the foreign ministry, oil ministry, and national broadcast company, attended a reception at the Korean embassy in Tehran marking the end of the show. The Korean ambassador at the time remarked that it was the

first time so many high-ranking officials had attended such a function. *Dae Jang Geum* also ran in other Middle Eastern states like Jordan, Saudi Arabia, and Egypt. In fact, the drama has so far been aired in dozens of countries, including (but not limited to) China, Taiwan, Hong Kong, Malaysia, Singapore, Indonesia, Brunei, the Philippines, Thailand, Vietnam, India, Turkey, Israel, Nigeria, Romania, Hungary, Bosnia, Russia, Sweden, Colombia, Peru, Canada, the United States, Australia, and New Zealand. The epic drama drew even the most skeptical audiences in Japan, China, and Taiwan and helped to allay male resentment of the exclusively female fan-base for Korean dramas and celebrities. Middle-aged Japanese men sat with their wives to watch the drama when they returned home from work. Bilateral ties with Taiwan, which had turned icy after diplomatic relations were suspended, once again warmed, as symbolized by the re-opening of direct flights. Korean restaurants gained immense popularity in Hong Kong in the wake of the series, which had dramatized royal cuisine. After the dramas were rebroadcast for the fourth time in Singapore, the number of Korean restaurants in the city mushroomed from ten to sixty.

2.3.2 The Internet Connects the Wave Fast

The Internet has become an especially influential medium throughout the world. The Korean management agencies driving the K-Pop craze have for the last several years been making active use of social network services like Facebook and Twitter and operating their own channels on YouTube. Videos of the

famous female group, Girls' Generation, provided on SM Entertainment's YouTube channel, are the most widely loved videos globally. One of those videos, "Gee," had been watched 42 million times as of May 2011, with viewers from all over the world, including Thailand, United States, Japan and Europe. YG Entertainment, another management company leading the K-Pop craze, provided a live YouTube broadcast of a showcase marking the release of a new album by the project team "GD & TOP," composed of hip-hop group Big Bang members G-Dragon and Top; the program was watched simultaneously by 390,000 people worldwide. The speed of propagation is getting faster every day due to increasing numbers of social media consumers and fans of K-pop.

Tonight, released in the United States, reached No. 7 on *Billboard*'s Heatseekers Albums chart (listing albums by new singers), and No. 3 on its World Albums chart. This surprised industry officials, as little promotion work had been done in the United States, and the album was in Korean, not English. It was a startling development when contrasted with the case of the Korean girl group, the Wonder Girls, who broke onto the *Billboard*'s Top 100 a year earlier only after spending a year performing in the United States. *Tonight* reached No. 6 on the United States' iTunes store, and the music video of its title track was watched one million times within two days of being released on YouTube. Big Bang vocalist Taeyang saw his first album hit No. 2 on iTunes' R&B sales charts in the US and No. 1 in Canada within just a month of its online release in 2010. Within a few hours of its US iTunes release, Taeyang's *Solar International* album topped charts in Japan, Canada, and Australia.

Fans all over the world are new "following" Korean singers on Twitter. Siwon and Heechul (members of the boy band Super Junior), Jaejoong and Junsu (members of the trio JYJ), and 2AM's Jo Kwon all have over 200,000 followers on Twitter, where they communicate with overseas fans in English. Regardless of where they are, be it California, Hanoi or Cyprus, K-Pop fans can watch the music videos of their favourite signers on YouTube and trade gossip with other fans on Twitter. South American K-Pop fans hold regular meetings online and offline to share information about the most recent albums and concerts or promotional activities of their favourite singers. K-Pop appears to be generating more fans and popularity abroad than at home, and the Neo-Korean Wave is sprawling across the globe with a life of its own. The biggest English-language websites on K-Pop – Allkpop.com, Soompi.com, and PopSeoul.com –generate more traffic than major Korean music portal sites M.net and Melon. The most visited of these, Allkpop.com, gets 3,000,000 hits and 70,000,000 page views a month. Over 40% of the website's visitors are in the United States; another 10% are in Canada, 10% are in Singapore, and 10% are in other countries such as Australia and the United Kingdom. Founded by two Korean-Americans in 2007, the website has played an important role in sparking the online K-Pop craze, particularly in North America. Thanks to the K-Pop boom, within three years of its launch it had become one of the most visited websites in the world – in 2010, social media website Mashable selected it as its "Must-Follow Brand," putting it ahead of other leading American brands. Also, K-Pop group Super Junior was selected among all global artists as Mashable's "Must-Follow Personality," while

the "Best Web Video" award went to Jay Park, a former member of 2PM.

Flash Mobs around the World

On 10th-11th June 2011, the 7,000-seat auditorium of Le Zenith de Paris, one of
the largest venues in France and a place where most of the great names of
French pop music have recorded concerts, was packed with young fans. The
two-day event was a joint performance of singers with the leading South Korean
management company SM Entertainment, and it was recorded as the "official"
debut of K-pop (Korean popular music) on the European stage. The audience,
who had previously experienced K-pop mostly through the global video sharing
site YouTube, went wild at the dynamic live performance by their favourite
groups. The fans, most of them in their teens or 20s, were not just French. They
had come from all over Europe. It was a virtual representation of the continent,
with fans from Great Britain, Germany, Spain, Italy, Sweden, Poland, Latvia,
and Serbia. Regardless of their mother tongue, they shouted out the names of
each singer, sang along with the lyrics in Korean, and followed the dance
moves. The management company shot video footage of the performance,
which it posted in real time on its YouTube account. The electric atmosphere
was relayed live not only to local fans unable to attend, but to K-Pop fans all
over the world. There was intense media coverage of the event. About 20
European media outlets such as French public broadcaster 2TV and Franco-
German public broadcaster Arte TV were in attendance, as well as reporters
from Asian media like Japan's Sankei Sports and Fuji TV. They showed intense
interest in Korean pop music's advance into Europe. The French press seemed

surprised by the explosive popularity of K-Pop. The next day, the French daily

Le Monde ran special features on the performance with headlines like "Korean

Pop Wave Reaches Europe." Another French daily, *Le Figaro,* wrote that the

stars of K-pop, who were enjoying tremendous popularity among French youth,

had began to expand beyond Asia into Europe, and that Paris had become the

beachhead for the European advance of Korea's new generation of singers. In

particular, the Internet and social media have effected innovative

transformations in the way the Korean Wave is spread, while the speed of the

expansion – and its impact – have quickened and deepened so dramatically

that no comparison with the Korean Wave of old is possible. The age and class

structure of Korean pop culture consumers have grown much more diverse, too.

The Korean Wave has taken to classifying this new, transformed Korean Wave

as the "Neo-Korean Wave."

The thing that sets the Neo-Korean Wave apart from the original Korean Wave

is that its propagation has been much more lively and up-to-date thanks to the

Internet. Nearly universal access to high-speed Internet service,

interconnectivity, and development of a variety of mobile devices are – along

with the rapid growth of social media like YouTube, Facebook and Twitter –

effecting innovative transformations in the ways in which cultural content is

presented, consumed, and distributed. Accordingly, in recent years, most

Korean Wave fans, too, have come into contact with and/or consumed K-Pop or

Korean dramas for the first time through the Internet. People flocked from all

over Europe to see performances by Korean idol groups that had never

released an album or held a performance in Europe, and Korean K-Pop groups were able to sweep the Japanese charts simultaneously with their debuts because consumers were already aware of their music through their videos on YouTube. Influenced by the events in France, another flash-mob demanding a K-Pop performance took place in Peru a few weeks later. About 500 Peruvian K-Pop fans gathered in Lama's Monterrico district carrying pickets with their favourite K-Pop singers' name written on them. The flash mob turned into a Korean cultural experience with Korean food, dancing, and even a Taekwondo demonstration. The members also sent messages of support, by emulating the stage routines of various K-Pop groups.

The **Korean Wave** as Seen Through **YouTube Hits** for Korean Music Videos (as of 2010)

793,574,005 Total Hits

Over 10,000,000
5,000,000 to 10,000,000
1,000,000 to 5,000,000
100,000 to 1,000,000
10,000 to 100,000
Under 10,000

UK 8,278,841
Russia 1,281,345
Canada 20,858,251
Germany 5,588,537
South Korea 57,281,182
Japan 113,543,684
USA 94,876,024
Taiwan 1,316,533
Vietnam 5,577,902
Saudi Arabia 10,312,005
Philippines 38,833,619
Thailand 93,514,297
Brazil 6,043,920
Australia 9,358,642

Asia	566,273,899
North America	123,475,976
Europe	55,374,142
South America	20,589,095
Middle East	15,197,593
Oceania	10,738,793
Africa	1,924,480
Antarctica	27

Source:
You Tube Broadcast Yourself™

* This illustration is based on an image originally published in the JoongAng Daily on January 16, 2011.

Figure 2.4: The Korean Wave as seen through YouTube hits for Korean music videos. Source: JoongAng mail on 16 January 2011.

2.3.3 Neo-Korean Wave

The Korean Wave that began in the late-1990s included several export products, including dramas, music, film and food, but the primary axis of this phenomenon was television dramas. Geographically, the impact was focused on Japan, the Chinese-speaking world (including China itself), and Southeast Asia. This began to change greatly right around 2010. As we can see with the Paris concert and the YouTube numbers cited above, K-Pop – led by so-called "idol" groups – is spearheading a completely new trend while expanding the borders of the Korean Wave beyond Asia to Europe, North America, South and Central America, and elsewhere.

K-Pop Power

The Japanese current events weekly *AERA* reported that K-Pop could cause a "Korean invasion" in which Korean groups would dominate the Japanese music market like the British groups – led by the Beatles – that dominated the American music market of the mid-1960s. The major Korean daily *JoongAng Ilbo* ran an article in January 2011 analyzing a total of 923 music videos by Korean singers from Korea's three biggest management companies (SM Entertainment, YG Entertainment, JYP Entertainment) that had been posted on YouTube, the world's largest online video site. According to the analysis, internet users from 229 countries worldwide had watched the videos 793,570,000 times in 2010. By continent, the numbers broke down to

566,270,000 times from Asia, 123,470,000 times from North America, and 55,370,000 times from Europe. By nation, Japan came in first with 113,540,000 times, followed by Thailand with 99,510,000 times and the United States with 94,870,000 times; the rise of the United States as a major Korean Wave market was remarkable. A number of Middle Eastern nations, too, had watched the videos 300,000 times or more, including Egypt (about 630,000 views) and Kuwait (about 414,000 views). There were a good many names relatively unfamiliar to Koreans on the list as well, including Montenegro (22,000 views), New Caledonia (14,000 views) and Guadeloupe (10,000 views). Also noteworthy was the fact that North Korea, where Internet access is tightly controlled, still managed 224 hits.

South Korean Music Artists

The global pop music market had been driven by the United States, Europe, and Japan. Now K-pop singers have joined the scene and are causing a new sensation in this market, broadening their fan base worldwide. The young people of the world are registering their approval, even if they cannot comprehend the meaning of the songs when they are sung in Korean. So what is so special about Korean cultural content that it attracts a global audience? One of the reasons K-Pop has come to be loved globally is perhaps that the manner in which the public enjoys music has changed greatly in recent years. In the past, people bought CDs or listened to music on the TV or radio, but nowadays, thanks to the development of YouTube, people search for the music they want on their own. Moreover, because YouTube provides more music in

video rather than just audio format, music is now a multi-sensory experience synthesizing sight and sound. With its dynamic dances, attractive singers, and strong melodies and rhythms, K-Pop is breaking down the language barrier to charm music fans worldwide. Korean public broadcaster KBS once did an online poll on K-Pop targeting YouTube users. In the poll, in which 12,161 Internet users from 78 nations participated, respondents cited music, dance, and the good looks of the singers as the top reasons they have come to love K-Pop. In particular, 46% responded that they enjoyed the music. K-Pop site Allkpop.com also conducted a poll of its visitors as to why they loved K-Pop, netting similar findings.

Korean Films

Today, South Korea is one of the few countries where Hollywood productions do not enjoy dominance in the domestic market. Since the turning point of the 1999 film, *Shiri*, which is considered the first Hollywood style big-budget blockbuster in Korea, the Korean film industry has been turning out box office hits at home and abroad. Local products account for more than 50% of the movie industry. The quality of technology, storytelling, acting, marketing, and distribution has all developed to rank among the best in Asia. It has led to a critical rediscovery of Korean cinema. Korean films, directors, and actors and actresses have been receiving international recognition and awards. Moreover, production companies have turned global and giant, joining up with Hollywood counterparts and stars for multi-million-dollar film projects. Storylines and stars are actively sought out by foreign filmmakers. A host of Korean films had been

remade in Hollywood, Japan, and China and Korean stars were cast in Hollywood, Chinese, and Japanese films. Korean film has moved beyond the periphery and underdog stage and is marching into the global mainstream.

Once dominated by Hollywood and Hong Kong films, Korean cinema turned a new corner in the late-1990s as a new generation of filmmakers influenced by European and American films emerged with new ideas and experiments. Released in 1999, *Shiri* served as a tipping point in many ways, including budgeting, ticket sales, and storyline limitations. The movie, which is about a coup attempt by North Korean agents in Seoul, was seen by 6,500,000 people nationwide, beating out Hollywood box office hits like *Titanic*, *The Matrix*, and *Star Wars* in Korea. It earned 1.85 billion yen in Japan alone and was the top-grossing film in Hong Kong. The film touched on the still-sensitive issue of unification and drew critical and popular interest from Western audiences. The all-time box office hit, *The Host* (2006) epitomized everything Korean artists did best – parody, dark humour, fearless political and social critique, visual effects, scale, and great performances. Despite being characterized as a horror/monster film, the movie touches upon the hypocrisy of politicians and the media as well as the American military presence in Korea while returning to a favourite theme – the importance of the family. The way Korean filmmakers have incorporated Western filmmaking technology and styles to create unique sensitivity and emotional expression and deliver a characteristically Korean originality has drawn interest from filmmakers, audiences, and critics around the globe. Asian audiences feel sympathy rather than resentment at the way

Korean movies outperform Hollywood ones in their markets, while Western audience find the unexpected plot twists, humour, and morals in Korean films inspiring. In fact, more and more major Hollywood studios are turning to the Korean industry for original scripts, talent, and ideas. Park Chan-wook's *Oldboy* (2004) – runner-up at the 2005 Cannes Film Festival – is going to be remade into a Hollywood film by Spike Lee. Steven Spielberg and Will Smith initially discussed collaborating on the remake. Foreign films are restricted from broad theatrical distribution in the United States, and remakes serve as the best window to allow American and other English-speaking audiences a taste of Korean filmmaking.

Rain has gained global fame in both acting and singing. He acted in the Wachowski Brothers' *Speed Racer* (2008) and *Ninja Assassin* (2009), making him the first Korean to be named "Biggest Badass Star" at the MTV Awards. He was twice honored with *Time Magazine*'s "100 Most Influential People Who Shaped the World" status in 2006 and 2010. In 2007, he was included as one of *People*'s "Most Beautiful People." He took his "The Legend of Rainism" tour to Japan, Korea, China, Taiwan, Hong Kong, Indonesia, and finally Las Vegas in December 2009. Lee Byung-hun, who enjoys huge stardom in Japan and China, has been dubbed one of the "Four Kings" along with other popular actors Song Seung-hun, *Won Bin*, and Jang Dong-gun. Lee successfully entered Hollywood in the role of Storm Shadow in the American action film *G.I. Joe: The Rise of Cobra,* which grossed $302 million worldwide in 2009. He also won multiple awards with his single in Japan. Ryu Shi-won is active in both acting and

singing in Japan. Jang Na-ra has been busier in China, starring in Chinese TV dramas and shows and releasing Chinese-language songs. She played the lead in the Chinese drama *Bratty Princess* and was the only non-Chinese national to join in the 2008 Olympic song "Beijing Welcomes You." The girl group KARA got its own show in Japan. *URAKARA*, which first aired in January 2011, is a drama series on TV Tokyo revolving around the five members playing themselves searching for love.

2.3.4 Future of Korean Wave

The Korean Wave phenomenon has long been accompanied by intense debate regarding both its causes and future. Some predict that the Korean Wave is nothing more than a passing fad like the Japanese pop culture boom of the 1990s. Others criticize what they see as the Korean government's excessive involvement as in promoting the national brand. Overseas media observers, on the other hand, have criticized the excessively mechanical nature and commercialization of Korean pop culture. Still, Korean pop culture is spreading worldwide, where it is being consumed by an increasingly global audience. Korean pop culture fans open up websites completely on their own; these sites, in turn, attract millions of visitors. Korean film, drama, and music buffs download content from the Internet, while streets and shops are covered with ads and posters featuring popular Korean stars. Overseas performances by Korean singers are selling out, while more and more tourists – many directly inspired by Korean pop culture – visit South Korea on holiday each year.

For starters, Korean pop culture content is high-quality and competitive. Korean

dramas, films, animation, music, computer games, literature, and other cultural

content are well made, well marketed and well packaged. Despite its lack of

history, Korean pop culture sells itself as a global standard, and is now an

integral part of Korea's national image and brand, like Korean semiconductors

or Korean cars. This did not happen overnight: it was the product of many years

of hard work, planning, and investment. Indeed, one can see the so-called

"Korean development model" at work in the pop culture sector, too. With few

natural resources to exploit, Korea has depended on its human capital – hard

work and the will to succeed – to develop. Much time and money was invested

to cultivate talent, and foreign ideas were readily imported, provided such ideas

were of a high quality. These ideas were then innovated upon so that they took

on distinctively Korean forms. At first, Korean and Western pop music and film

might seem similar, but look closely and the differences jump out. Jian Cai, a

professor at Fudan University of China, wrote in his study on Korean Wave that

Korea presented "a model of rapid modernization while retaining its traditional

culture." Korean pop culture has incorporated Western elements while staying

true to Korean traditional values. As Jian observed, "Korean pop culture has

borrowed the best of Western popular culture and recreated it according to

Korean tastes." South Korea's rare success in discovering its own cultural

identity, along with the national rags-to-riches narrative, has inspired hope and

envy in its Asian neighbors. To Westerners, the Koreans' adoption of Western

styles into their own culture comes off as fresh. South Korean pop singers are

just as sassy, cool, and energetic as their American counterparts, but much less raunchy. They harmonize the old and new, and while they might behave modestly, they exude a confidence earned through many years of hard work and training. Their songs are written by the best songwriters of Europe and America, their dances scripted by American choreographers. Their videos are produced by the best production teams in the business. Once on the Internet, these videos entertain and inspire countless fans around the world. While distinctively Korean in feel, South Korean pop culture is blessed with a universal appeal thanks to its easy-to-follow tunes, dance moves, and storylines.

New trans-cultural flows like the Korean Wave are challenging the Western-centric nature of contemporary pop culture and contributing to a more comprehensive understanding of globalisation. Whereas many studies have criticized the unequal nature of cultural flows between East and West, and reiterated the significance of cultural proximity, a crucial point about the spread of the Korean Wave is that thanks to digital technology, local cultures are now able to travel even to remote corners of the world. New media platforms like the Internet and satellite TV have proved vital in spreading Korean culture in markets such as the Middle East, Europe, and beyond. Inter-Asian cultural affinity has also played an important role in the proliferation of Korean culture overseas. Studies have shown that Asian audiences identify more with Korean culture than with Western culture, or even Japanese culture. Beginning in the late 1990s, Korean dramas took over from Japanese dramas as the new "trendy" urban option for Asian TV audiences. Korean scholars credit cultural

hybridity with simultaneously promoting globalisation and localisation of Korean pop culture in both the global and local markets. Since the 1990s, Korean culture has grown increasingly globalized. Music legends Seo Taeji and Boys, for instance, revolutionized Korea's cultural landscape by introducing American pop music styles like rap, metal, and rock. This was only part of the story, however. Their real root of their phenomenal success was their ability to adapt these styles to the needs and sensibilities of Korean youth. Since Seo Taiji, this hybrid hip-hop culture has thrived and even spread beyond Korea's borders. Korean pop culture seduces audiences by combining the enticing image of Westernized modernity with just the right amount of Asian sentimentality. This fusion is at the base of the Korean Wave. Korea took advanced foreign cultures, grafted them onto its own, and produced an advanced culture all its own. In the global village, cultural exchange is no longer a one-way street. Korea pop culture is the product of adoption, adaptation and transformation, the result of communication among several cultures. It is not simply Korean. In this sense, the Korean Wave allows diverse cultures to converge and communicate.

2.3.5 The Impact of the Korean Wave on Urban Projects

The impact of the Korean New Wave cultural products has been on the tourism industry as well as urban development projects. In this sense, these urban projects have reacted to the creation of demand for tourism to South Korea from people in countries such as Japan, Taiwan, Singapore, Thailand, and China.

Chungmuro in downtown Seoul is to be turned into a theme street where tourists

can immerse themselves in Korean pop culture. The Ministry of Culture, Sports and

Tourism has announced it will spend W21.4 billion (US$1=W1,097) on stars' name

plates, hand prints, media artwork and collections as well as exhibition and

experience spaces. Its appearance will be modeled on the Hollywood Walk of

Fame or Star Street in Hong Kong. The ministry wants to decorate the entire 800 m

street as a shrine to the Korean Wave in hopes of restoring some of its old glamour

to the former center of the Korean film industry. Some W5.1 billion will be

earmarked for the construction next year, with the project scheduled for completion

in 2014.[76]

The aim of that particular project is to transform the area into a culture and

publishing complex in collaboration with the Jung District Office. The 2,000 sq.

m theater will house a museum, bookstore, cafe, and other shops. The

Freedom Center on Mt. Nam and the Dongguk University Media Center are now

anticipating a synergic effect between these two very different institutions of

design culture.

The Korean Wave theme park in Gyeonggi Province near Seoul is another

urban project that is related to a growth in far-east Asian tourism. However, this

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[76] 'Chungmuro to Be Turned into Korean Wave Theme Street',
http://english.chosun.com/site/data/html_dir/2011/04/01/2011040100325.html (accessed 11 April
2011). A ministry spokesman insisted the theme street "will be a space where state-of-the-art
technology and culture meet to enable visitors to experience the Korean Wave in depth, not just
a space to drop by to take a picture or buy a souvenir. The Myungbo Art Hall will be converted
into a "Korean Wave experience center" under an agreement with the owner of the building. The
Korea House in nearby Pil-dong area will be developed into a venue to showcase Korean
cuisine and traditional culture.

project can also be seen as a bad example of city branding because those involved are simply paying attention to economic values, rather than other factors such as the natural environment, local community needs, and local harmony.

> Gyeonggi Province is to appoint Jackie Chan as a goodwill ambassador for a
>
> Korean Wave theme park on Wednesday. Hallyuwood – a conflation of hallyu or
>
> Korean Wave and Hollywood – features a variety of tourist facilities such as studios
>
> where Korean soap operas and films are made, entertainment facilities, museum,
>
> shops, Korean cooking classes and restaurants. The park is going up on a 990,000
>
> sq.m site and is to be completed by 2012.[77]

Having examined the South Korean music industry in this chapter – such as the iRiver MP3 player vs. iPod being a sign of resistance to American culture, the paradigm shift in the music industry, the pressing problem of illegal music downloads, the Korean cultural wave being based largely on the export of Korean music – it shows the centrality of the music industry within the highly digitised nature of South Korea. The power of cultural flows has hence been intensified by digitalisation in South Korea, especially through its music industry. Studying these productions by the music industry within a highly digitised culture can help us to find new models for evaluating contemporary Korea in a global context. It can also help to build a conceptual foundation for new

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[77] 'Jackie Chan to Publicize Korean-Wave Theme Park',
http://english.chosun.com/site/data/html_dir/2008/05/28/2008052861015.html (accessed 28 May 2008).

contemporary Korean architecture by the cultural significance of the Korean New Wave. In order to make this point in more explicitly urban terms, it is now time in the next chapter to examine South Korea's 'bang' culture, in which repeated clusters of small, internalized cellular rooms in tower blocks are used for specific leisure activities. Such examples of neighbourhood 'bang' facilities include those of jjimjilbang (saunas rooms), Pcbang (internet rooms), noraebang (singing or karaoke rooms), churches and sundry institutes. These kinds of activities, mixed together in significant numbers in the same locations, indicate the underlying desire of South Korean people for social connection in an era when their daily lives are clearly changing so rapidly. It is hence a mass psychological desire that seems to be satisfied only by density, mixture, and the overlapping of boundaries between different uses.

Chapter 3: 'Bang' Culture

Having looked in the last chapter at the music industry, this chapter will look at the role of what is termed as 'bang' culture in South Korea's city life. In many ways, 'bang' culture is the epitome of spatial culture and urban conditions in South Korea. And as a cultural product it cannot be simply categorized according to the predominant western architectural theories and practices, and as such it is the spatial 'key' to understanding Korean architecture and urbanism as a collectivised experience. Any successful architectural and urban changes in South Korea need to study and build up the strength and uniqueness of 'bang' culture. It thrives in a condition where most buildings are younger than the people who live or work or play in them. Seoul in particular is a city that has witnessed its previous layers all but erased through explosive growth and development. 'Bang' culture operates in many regards as the cultural key to contemporary South Korea. Here I intend to expand this spatial culture as a wider condition in what is one of the world's most densely populated countries – an urban condition which continuously expands and yet is differentiated in many complex ways:

> The bang does not generate a new typology, nor is the bang accommodated in an
>
> indeterminate space. Instead the bang is in a constant state of metamorphosis to
>
> accommodate the banal but strict prototype of the building itself. It is fundamentally
>
> beyond the control of architect and planner: it is 'other' architecture without

architects. The city of the bang leaps directly from the village to the city of

information technology, without passing through the utopias of the modernist city

and the revisionist model of the postmodern city. The holistic concept of a

continuous and organic spatial configuration spreading across the city is replaced

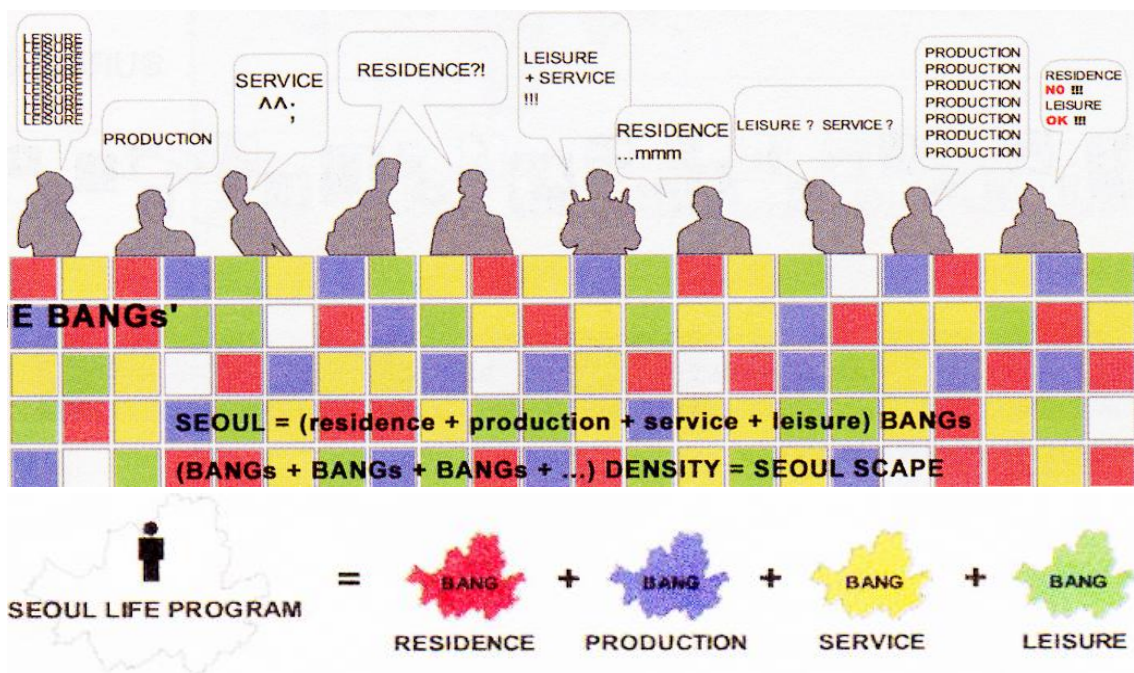by the discontinuous and transpatial network instantiated by the emergence of the

bang.[78]

Figure 3.1: Diagrams of 'bang' culture in South Korea.[79]

Modernistic architectural thinking, which generally identified function with space,

is frequently negated by dynamic cities, intensive architecture, and ever-

changing urban cultures. In downtown areas of South Korea it is no

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[78] Do-young Song, 'The making of the urban everyday life culture in Korea: an analysis using the concept of speed in "Bang(room)-culture" industry, Hankook munwha ilyuhak, v.33 n. 2 (2000) p 54.
[79] Source: Do-young Song, 'The making of the urban everyday life culture in Korea: an analysis using the concept of speed in "Bang(room)-culture" industry, Hankook munwha ilyuhak, v.33 n. 2 (2000) p 70.

exaggeration to say that 'bang' (room) culture gathers together all of modern

Korea. Korea's 'bang' culture continuously expands and is always differentiated.

There are noribang (play room), noraebang (singing room), Pcbang (pc room),

yeonghwabang (movie room), geimbang (game room), seminabang (seminar

room), dalimbang (rumming room), sumyeonsil (sleeping room).

> These spaces are taken as case materials to observe the making of the
>
> characteristic of urban everyday life culture in Korea. 'Bang-culture' cases are
>
> expected to offer some examples of the newly spreading cultural system via
>
> globalizing cultural industries, and the local interpretation of that general tendency
>
> in a local case of Korean urban culture. At the same time, the 'Bang-culture'
>
> reveals us more. As a phenomenon of the mass culture, the 'Bang-culture' offers a
>
> case of this last in today's Korean context. The pattern of communication between
>
> human beings and machines of intelligence is, for an instance, now an important
>
> factor for the environment of 'culturalization' and 'socialization'. And this new type
>
> of communication is showing, for each case, somewhat local (or 'Korean' it means)
>
> way of interpretation and adaptation.[80]

3.1 Vertical Extrusion and Layering

Examples of neighbourhood 'bang' facilities include jjimjilbang (sauna rooms),

Pcbang (internet rooms), noraebang (singing or karaoke rooms), churches and

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[80] Do-young Song, 'The making of the urban everyday life culture in Korea: an analysis using the concept of speed in "Bang(room)-culture" industry, Hankook munwha ilyuhak, v.33 n. 2 (2000) p 76.

institutes; these activities are then mixed together in great numbers within the same locations. As the 'bang' acts as an 'internally exploding spectacle,' the extruded appearance of buildings begins to look externally look like a secretion of these 'bang' rooms, or even as the remnants of some mysterious explosion. The more that this urban situation intensifies, the more that South Korean people become inward-looking toward the building's interiors and try to forget about wider 'extruded' concepts like time and space.

Figure 3.2: Vertical buildings represent various 'bang' culture.[81]

Vertical spread profiles of commercial city spaces from the secular to the ecclesiastical can form a single building: a Noraebang on the basement, a fast food restaurant on the 1st floor, a Pcbang on the 2nd, a plastic surgery clinic on the 3rd, a commercial learning institute on the 4th, a church on the 5th floor, etc. The

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[81] Source: Jin-hee Park and John Hong, *Convergent Flux: Contemporary architecture and urbanism in Korea* (Basel: Birkhauser, 2012) p 55.

layering of these spaces, of which the bang is a major part, functions to conceal

irregularities of urban fabric behind the street. And while the chaotic signboards

attached to the external walls represent extremely dense but random spatial

configurations inside, they do not really reveal the way in which the buildings are

perceived, conceived and inhabited.[82]

Figure 3.3: Club day in Hongdae area in Seoul.[83]

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[82] Soon-joo Kwon, Kim Jeong-ok and Chung Dah-young (eds), *Faster and Bigger* (Seoul: SPACE Publishing Co, 2007) p 145.
[83] The clustered clubs in the Hongdae host a 'Club Day' on the last Friday of every month. it started in 2001 and has revitalised the area with Korean music culture. With £ 10 ticket price people can go to 11 clubs with one drink on the club. It shows various 'Bang' culture such as jimjilbang, noraebang and Pcbang.

3.2 Another Living Room – Jjimjilbang

> The jjimjilbang, which combines a steam bath, fitness room, lounge, restaurant, and sleeping area, provides space where half-clothed bodies intersperse between a variety of functional areas. The jjimjilbang blurs the lines between the collective and the individual, normal and deviant behavior, privacy and voyeurism. The bang is an incarnation of the room, the house and the city, but it does not belong to any of them. The city of the bang oscillates between the domestic realm, institutionalized place, and urban space.[84]

Jjimjil (the Korean-style sauna) introduces staying in a tight indoor space with very high temperatures to relax the body, releases sweat and facilitates metabolism. Being good for one's health, jjimjilbang started to sprout in South Korea's urban spaces in the late-1990s. Since then, jjimjilbang has spread briskly and evolved, combining the old concept of public bathhouses with other more contemporary recreational programs – to such an extent that now having a jjimjil sauna has become a secondary purpose for going to a jjimjilbang. In fact jjimjilbang, which now number 1,600 nationwide, merely maintain their nominal name and have become more like a 'huge relaxing space and cultural space.'

> Jjimjilbang is a place which challenges speed through unlimited "relaxation" and extreme "laziness" and by doing so tries to forget time and space. Therefore, time

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[84] Soon-joo Kwon, Kim Jeong-ok and Chung Dah-young (eds), *Faster and Bigger* (Seoul: SPACE Publishing Co, 2007) p 88.

in jjimjilbang plays its role fully through indefinite "regression" rather than

"surpassing." [85]

Figure 3.4: Various jjimjilbang spaces.

Although there are different types of 'bang' depending on fees, and some of

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[85] Do-young Song, 'Structure of a cultural Industry and the Model of Consumption in Everyday Life: Jjimjil Bang's Case', In Mun-ok (ed.), *Leisure Time and Cultural Consumption in Contemporary Korean Culture*, (Seoul: The Academy of Korean Studies, 2007) p 98.

which are open for 24 hours, one does not feel the pressure of time, as one can often stay there for a whole day for just £3-5. An especially unique landscape is presented in jjimjilbang (sauna rooms), where people can choose to sleep, eat, play card games, read books while lying down or watch television anywhere. A careful internal landscape is presented by which it appears as if people's living rooms have all been unfolded in one place. 'Bang' facilities encompass all the different generations, ranging from infants, children and teenagers to adults and the elderly; furthermore, jjimjilbang transcends any barriers of gender. Taken together, it is an internally exploding spectacle. Private areas are limited to shoe cabinets and lockers, but other than that, all one's private activities are exposed to others – just as one mixed with the private activities of others.
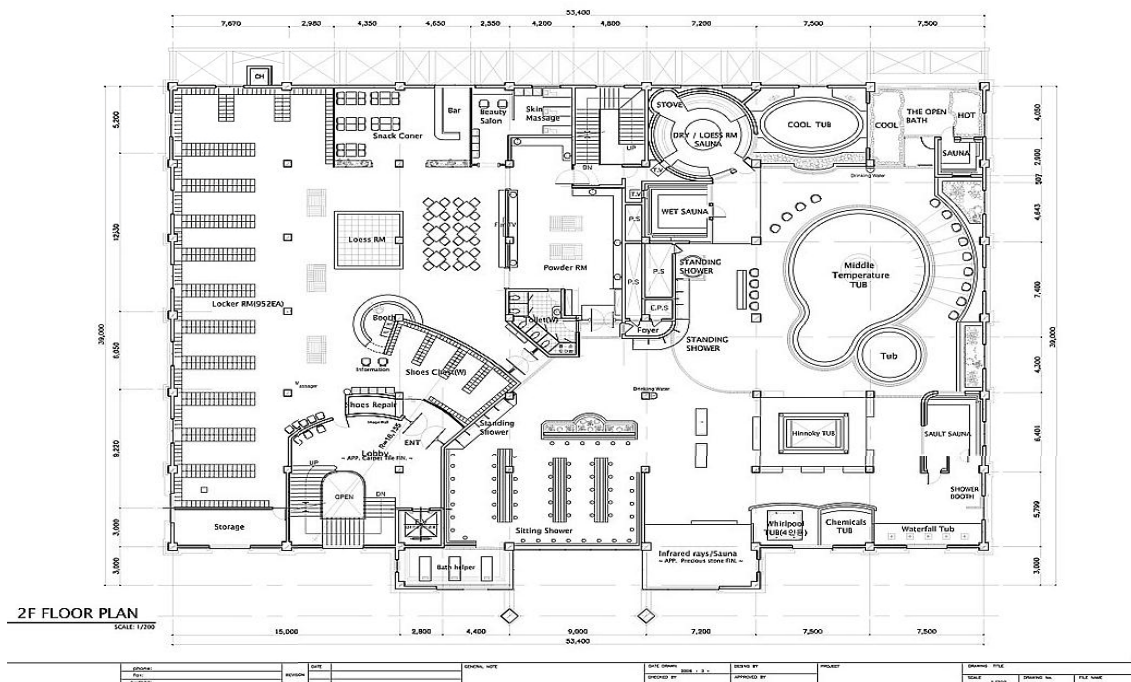

Figure 3.5: Jjimjilbang spaces. 2nd floor plan.[86]

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[86] Source: http://isoiso.tistory.com/. Area: 2155.6. sqm. Design: 2010. Namu Jimjilbang.
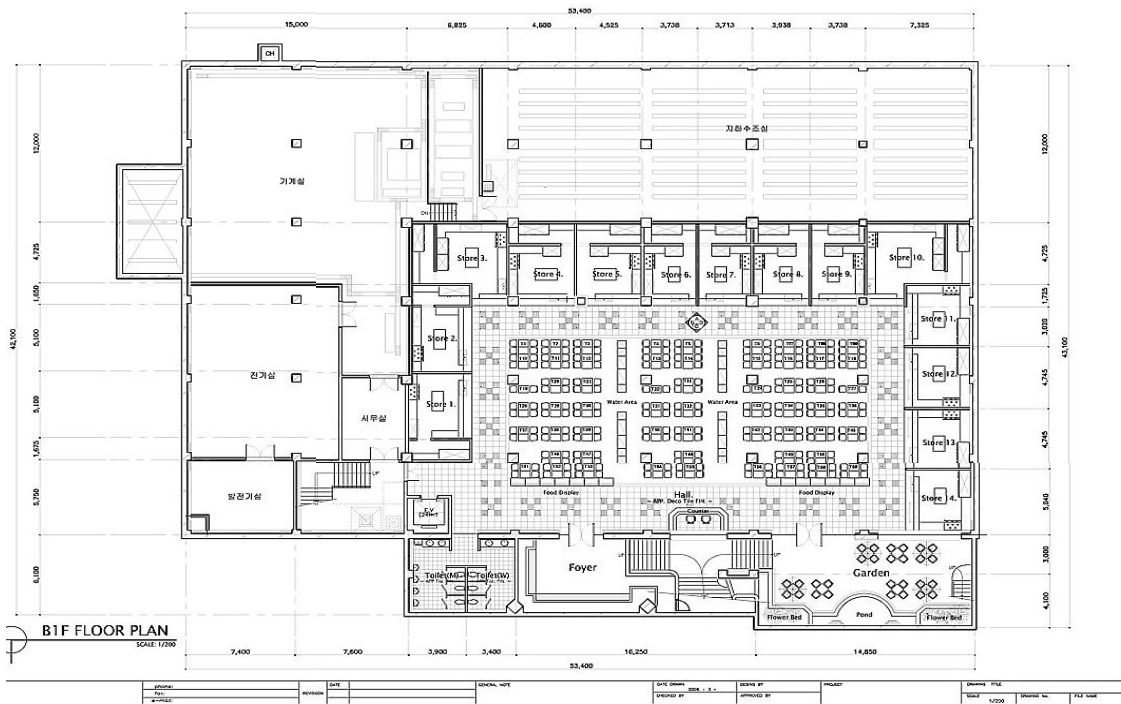
Figure 3.6: Jjimjilbang spaces. Basement floor plan.[87]

> Due to the borderless activities, a unique landscape is presented where it appears
> as if people's living rooms are unfolded in one place. As jjimjilbang is a bizarre
> space which transcends all existing social norms and representation of values, the
> government is embarrassed as to how it should cope with the spread of this
> suddenly appeared facility.[88]

Jjimjilbang is perhaps the strangest of all the rooms, as here scores or
sometimes even hundreds of strangers gather on the floor of jjimjilbang and
watch soap operas on large TV screens in various postures, while semi-naked.
It is particularly strange in that the boundaries between common sense and

[87] Source: http://isoiso.tistory.com/. Area: 2332.3. sqm. Location: Yongsan in Seoul. Local architects.
[88] Jae-jun Lee, Kim Jeoung-eun and Kim Hyouk-joon (eds), *Seoul Scenarios* (Seoul: SPACE Publishing Co, 2004) p 56.

senselessness are broken down very 'comfortably.' In jjimjilbang, since people are supposed to wear uniform clothing, all codes of social representation by individuals disappear and spatial representation is broken down. There exist no reasonable norms of behaviour other than unlimited 'relaxation'. Jiimjibang is a plaza and park in which people from all walks of life can gather and relax together. So by what sort of name should we call this type of space? On the other hand, jjimjilbang, which of course is an indoor space, acts as another home that exists outside of people's main homes: it becomes a kind of private space in, which might take place activities from people's private living rooms, without reservation. Moreover, such acts the fact that takes place collectively and across all generations amid anonymity, given by the uniform clothing and people choose to stay there in groups.

3.3 Noraebang

Korea's noraebang (literally meaning 'singing room') refers to a place for singing, yet it is distinctively different from Japan's idea of karaoke. If Japanese Karaoke is a narcissistic activity in which people take turns to play the roles of either the audience or the featured singer in a polite manner within a large open hall, Korea's noraebang is instead a space of collective participation and collective mania, comprising 10 or more small private rooms whose sizes range from 9-34m², depending on their type. There are as many as approximately 30,000 noraebang that one can find anywhere in urban spaces across the nation.

The contemporary city fascinates us not so much with the new typologies it

introduces as with the manner in which established space-designations have

shifted and been reconfigured. One such space-designation is the Korean bang,

roughly translated as 'room'. While the room has traditionally been considered a

walled segment in a domestic space, the bang has infiltrated the Korean urban

landscape of commercialized space with enterprises such as noraebang. The

noraebang, a scaled-down version of the Karaoke bar, is the primeval cave festival

in the midst of the contemporary city. Visual, audible, olfactory, tactile, and

gustatory sensations are simultaneously experienced in this tiny black box.[89]

The noraebang rooms feature a 'continuance of ceaseless singing' and the

excessive deviation of 'groups' who are absorbed in a form of speed. No one

visits and sings in a noraebang alone, as the essence of this space is a carnival

atmosphere to inspire a sense of 'being together', rather than merely just

'singing'. And the key principle seems to be that the singing should not ever be

stopped. The conditions in noraebang, which charge customers on a time basis

(after payment, one's allocated singing time appears on the Karaoke machine),

which encourages a situation of ceaseless singing. Any silence generated

between songs means a 'halt' of speed, which might lead to people's

'awakening' from the collective immersion, and so the stoppage of singing is

considered taboo. In noraebang, the singing therefore has to be continuous: it is

very difficult and unnatural for groups to be able to agree upon termination of

singing, and so it just goes on. In other words, the carnival is severed with the

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[89] Soon-joo Kwon, Kim Jeong-ok and Chung Dah-young (eds), *Faster and Bigger* (Seoul: SPACE Publishing Co, 2007) p 176.

halting of the singing machine's timer. By borrowing the format of only being

only ever terminated by others, people avoid any slowing of singing speed. At

any rate, they all do their best to go as far as long they can.

Figure 3.7: The noraebang rooms feature a 'continuance of ceaseless singing'.

Although the 'bang' interiors differ greatly, the interiors of the noraebang are generally an extreme manifestation of kitsch features from popular culture in South Korea. Various wall paintings and ceiling paintings employ fluorescent materials, gaudy lighting, artificial elements of nature made from fibreglass reinforced plastic (FRP) and unfathomable installations which harmonize with the high-tech digital singing machines and fantastic images on large multi-screens and PDPs. In this space, technology serves up everyday kitsch to the fullest extent. High-tech legends of technology never manage to overwhelm the mythical power of the collective spell enacted by this space.
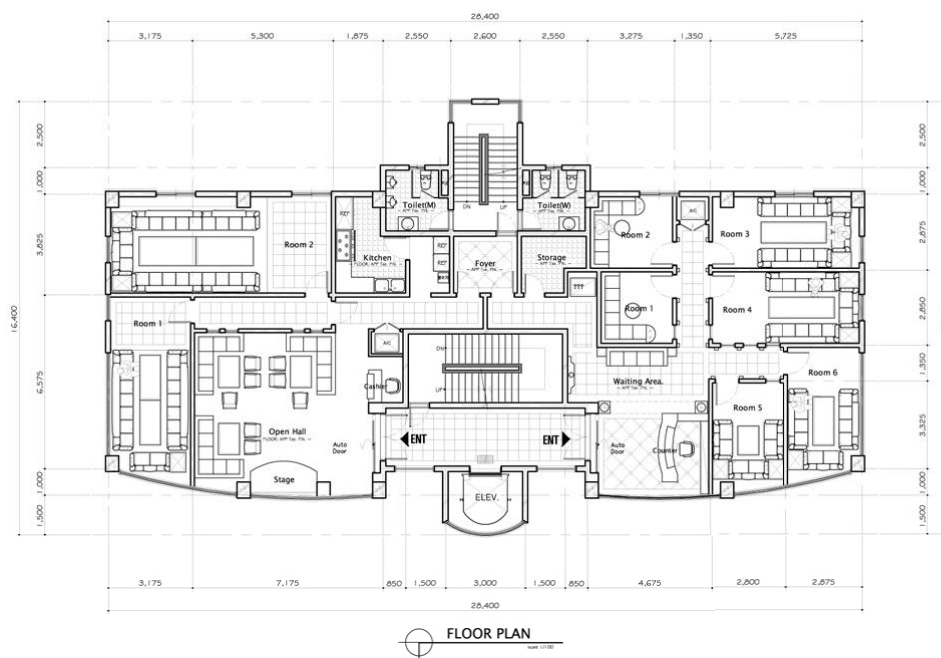

Figure 3.8: The noraebang rooms feature vivid interiors.[90]

That is why trendy singing machines developed by one of the major conglomerates in Korea, featuring advanced sound and images, actually failed

[90] Source: http://isoiso.tistory.com/. Location: Soo noraebang in Seoul.

in the marketplace, and couldn't match the sales of crude singing machines developed by smaller companies. The main small company has since grown into a solid middle-ranking company, representing now the nation's typical small-to-medium-sized enterprises, all on the back of singing machines.

The temporal nature shown by this space of Wonderland as if people were under collective hallucination is the stark opposite of oblivion of speed through the "screeching race" shown by noraebang. Jjimjilbang is face shaped by extreme speed of the Korean society.[91]

Figure 3.9: Noraebang rooms floor plan.[92]

[91] Do-young Song, 'Structure of a cultural Industry and the Model of Consumption in Everyday Life: Norae Bang's Case', In Mun-ok (ed.), *Leisure Time and Cultural Consumption in Contemporary Korean Culture*, (Seoul: The Academy of Korean Studies, 2007) p 45.
[92] Source: http://isoiso.tistory.com/. Area: 432.9. sqm. Location: Hongdae in Seoul. Local architects.

Figure 3.10: Noraebang rooms 1st floor plan.[93]

In sum, such a condition of indoor collective immersion that takes place in noraebang is an act of incantation and a ritual by which one tries to 'go ahead of time', but only on the condition of 'being chased by time.' This is a place to forget about the notion of time, place and speed through the pursuit of endless songs, namely, the pleasure of defying speed, and collectively to transcend the limited space through the use of gaudy images. No other form of interior design seems possible here. The temporal and spatial theme of these spaces is 'endlessness.' This group is rather like a legal motorcycle gang allowed to run at a dizzying speed through the extremely limited space of 'room.' In which other public spaces in South Korea can such collective desires on endlessness of time and space possibly be fulfilled so well?

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[93] Source: http://isoiso.tistory.com/. Area: 396.5. sqm. Location: Shinchon in Seoul. Local architects.

Noraebang is a 'bang (room)' which fulfils a desire for maximum infinity through the minimum finite means. Herein lies the clever irony of Korea's internalized public spaces in its big cities.

3.4 Digital Space – Pcbang

> The proliferation of the bang in the cities of Korea has been correlated to ethnic and linguistic homogeneity. Koreans do not simply retreat from the public to these privatized milieus, but use these places to relieve their fear of alienation by constantly reconfirming their sense of relatedness, which Emile Durkheim called mechanical solidarity. Explosive Internet and mobile phone usage, coupled with hyper-dense conditions, serves to intensify and diversify the expression of these mechanical solidarities. Internet users in Korea, called "netizens", enjoy activities via online communities, cyber cafes, or chat rooms in portals and game sites that often turn into offline activities. The city of the bang absorbs these seemingly heterogeneous but exclusive socio-cultural networks into its fabric.[94]

South Korea has 20,000 internet cafes called 'Pcbangs' where the consumer can rent up-to-date PCs with high-speed internet access for about 50p per hour. These are also popular places to play videogames. Often a whole team of gamers will go to a Pcbang to play online inside the same game, such as Lineage: they sit at neighbouring PCs and play together in the same part of the

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[94] Soon-joo Kwon, Kim Jeong-ok and Chung Dah-young (eds), *Faster and Bigger* (Seoul: SPACE Publishing Co, 2007) p 121.

digital environment. This kind of playing together is not possible in one's home, even with broadband, as typically most homes don't yet have enough high powered PCs next to each other. This fascinating phenomenon, far from being merely the virtual replacing the physical, has instead created new forms of the occupation of interior public space.

Speed New up

the world leader : internet usage, now with the per capita penetration of online use having almost reached 100%

Pcbang

play videogames: a whole team of gamers will go to a PC ang to play online inside the same game
South Korean broadband speeds are the world's fastest while the costs of broadband are the world's lowest

20,000 internet cafes

Figure 3.11: Pcbang interiors, plans.

Observing the details of 'bang culture' cases, we could find the effects of the

concept of speed in cultural industry, and the result of it which is the recomposition

of cultural logic in Korea's urban everyday life. The new disruptions of cultural

territories would be an important one of these effects. The decline of the value of

kinship-oriented relationships, of common geographic background, and of other

face-to-face human communication for the culturalization & socialization is some

important effects. The role of machines, or "artificial intelligence tools" is replacing

some of theses socialization factors.[95]

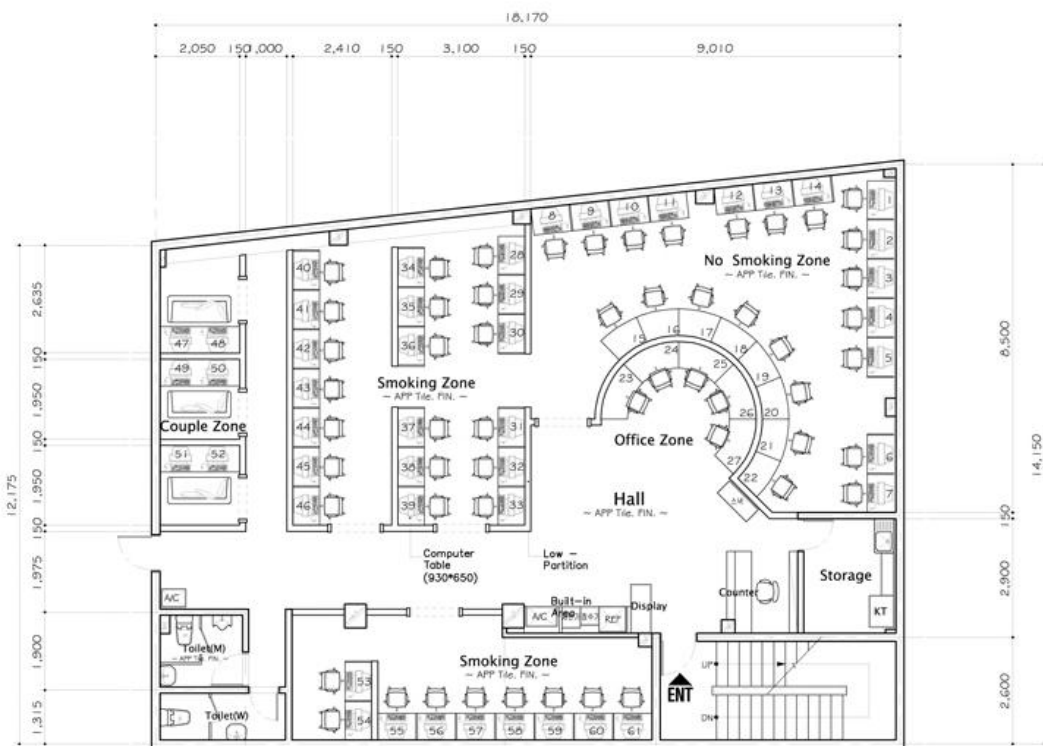Figure 3.12: Pcbang plan.[96]

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[95] Jae-jun Lee, Kim Jeoung-eun and Kim Hyouk-joon (eds), *Seoul Scenarios* (Seoul: SPACE Publishing Co, 2004) p 22.
[96] Source: http://isoiso.tistory.com/. Area: 230.4. sqm. Location: Shinchon in Seoul. Local architects.

The virtual becomes a code – a form of bringing together, if not whole communities, then at least groups or tribes which might otherwise remain unknown to each other. Especially the success of new technologies depends to a large extent on the ultra-digital environment of South Korea. The country is the obvious world leader in terms of internet usage, with the per-capita penetration of online use now having almost reached 100%,[97] and with all its internet users having migrated over to broadband.[98] Reflecting this leadership in the use of the internet, South Korean broadband speeds are also the world's fastest, while the costs of broadband are the world's lowest.

Having this looked at the 'Bang' culture in South Korea, the phenomenon of urban daily culture in contemporary South Korea during the recent era of globalisation, Korean architecture and urban daily lives have become deeply engaged with western culture, although often the latter have not been deeply understood. This is perhaps not surprising, since it is so tempting for those in South Korea simply to join in this current globalising trend without thinking. Hence the new technologies, global markets and strategies of globalisation are all undoubtedly fundamental to understanding the unprecedented growth of cities in Asia in general and theses in South Korea in particular. On the other hand, specific forms of urbanism and architectural design have been adopted as a response to theses globalising conditions. 'Bang' culture introduce new perspectives about the subject of cultural transfer, revealing the characteristics

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[97] Source: ITU (International Telecommunication Union) 2006.
[98] Source: NIDA (National Internet Development Agency of Korea) September 2005.

of hybridisation of binary elements – including traditional (Korean) elements and new elements originating from the West; globalisation versus localisation, modernism versus post-modernism, and acceptance versus resistance during the process of globalisation which has been happening over the past few decades.

> The time lag of cultural adaptation for different social groups in face of the rapidly transforming cultural environment gave some important effects. The phenomenon of "double standard", which has been developed in Korea with formal and highly moralistic value and a more expressive value in practice, is in the process of 'structuralization' – a solidification in the result – of urban daily culture in contemporary Korea. And "bang-culture" cases reveal us some meaningful examples of this phenomenon.[99]

Though this investigation of 'bang' culture such as three major 'bang' cases it is clear that cultural adaptation and transformation of culture has reacted to rapid globalisation in Korean daily life. During the cultural transformation the process of fragmentation and generalisation has been worked by 'spontaneous' and 'irregular' creation. 'Bang' culture has constantly been changing and so forms a continuous flow like a river. In the *Made in Tokyo* book, the authors make play of the architectural and urban forms created by 'anonymous' urban building, as being a modern version of 'architecture without architects', since the bang phenomenon seems to fit into that kind of approach. 'Bang' culture is basically

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[99] Jae-jun Lee, Kim Jeoung-eun and Kim Hyouk-joon (eds), *Seoul Scenarios* (Seoul: SPACE Publishing Co, 2004) p 111.

beyond the control of urban planners and architects. Not surprisingly, there has been interest from at least some architects in 'bang' culture, including a display at the 2004 Venice Architecture Biennale, even if as yet it has not made a major impact on architectural or urban thinking in South Korea. Has 'bang' culture nothing to do with architects? Should they ignore or accept the emergence of 'bang' culture? Given its prevalence, architects have to accept the 'bang' culture even though its design and production is out of their hands. They should take a risk in seeking to recognise the kinds of spaces created by 'bang' culture, and should learn from the ways in which it problematises the public/private space and inside/outside space divisions that are usually used in western cities – indeed, it mixes them more closely together. In the English language, the definition of a room consists of a simple, common term such as living room, dining room, bedroom, bathroom, and classroom without any inherent distinction between private or public spaces. In French, the division between common needs and the special purpose of room is also clear. *Chambre* is specifically a room with a bed in it, for sleeping, and then the word *salle* is used along with nouns to indicate special purposes such as bathroom (*salle de bain*), living room (*salle de sejour*), classroom (*salle de classe*), and dining room (*salle a manger*). The concept of 'bang' however lies between *chambre* and *salle* in French because the term 'bang' is not categorised as just either private or public rooms. When the door is open to a corridor, the 'bang' becomes a public space, from which a private space can be created by closing the door.

Having proposed 'bang' culture as the key urban condition in cities like Seoul,

and thus as something unique to South Korean culture, it is now time to examine a very different phenomenon: the architectural production of a Korean tendency which can be labelled as 'landscape urbanism', an approach which reverberates well with the sensibilities of the Korean people, and one that seeks to reconcile the demands of high-density cities with a more horizontally based pattern of parks, opens spaces and greater connection with nature. After 'landscape urbanism' was transferred to the different cultural context Korea, its major concepts in turn came to be transformed, generating new patterns and methods to connect the constitutive elements of the built environment. It is hence important to analyse the range of theoretical approaches to cross-cultural studies in existing western architectural discourses to ask what is happening in South Korea: for example, there are crucial issues of criticality, aesthetics, materiality, and so on. I thus will attempt to examine how such ideas have been transformed in the different cultural context in Korea by bringing in other intellectual disciplines, and using other forms of words and images.

Chapter 4: Landscape Urbanism

Having looking in the last chapter at 'bang' culture, this chapter turns to a more ostensibly architectural subject. This chapter will look at the misuse of western ideas in South Korea which just do not fit in with the realities of everyday life and cultural practices. It is best expressed in the strange craze for Landscape Urbanism in South Korea since around the year 2000. The argument that will be put forward here is that thematic basis of 'landscape urbanism' is deeply flawed because it cannot take into account cultural reactions in Korea, such as 'bang' culture, popular crowd-driven activities, and the hyper-digitisation of people's lives. Hence this chapter deconstructs Landscape Urbanism to show that it simply does not work in South Korea, and hence also that a newer and better approach is required.

In essence the chapter will ask one key question: just why has the idea of 'landscape urbanism' become such a dominant movement in South Korea since around 2000? Until the introduction of 'landscape urbanism', which came from the USA, theories of city development based on building typologies and contextual relationships were not seen as suitable for everyday South Korean reality. The result was that new development initiatives had hitherto failed to produce any meaningful results for South Korean cities, and were clearly unable to resolve urban problems as effectively as the more theoretical and indeed political projects that were being created by urban design institutes in the

country. It was in this context that 'landscape urbanism' came to be introduced to South Korea, becoming the dominant architectural and urban movement. Its arrival also came after the period in the mid-1990s when the debate on this new urbanistic trend really took a hold in western countries, most notably in the Netherlands. James Corner is the author of an essay entitled "Terra Fluxus."[100] He has identified five general ideas that are important for use in Landscape Urbanism. They are as follows:

1) Horizontality – the use of horizontal alignment in landscaping, rather than relying on vertical structuring.

2) Infrastructures – placing less of an emphasis on urban infrastructures that have been traditionally used, such as roads and airports, and instead relying on a more organic use of infrastructure.

3) Forms of Process – the idea that structures should come from more than just their physical shape and form.

4) Techniques – those who practice the idea of landscape urbanism should be able to adapt their techniques to the environment that they are in.

5) Ecology – the idea that our lives intertwine with the environment around us, and we should therefore respect this when creating an urban environment.

But 'landscape urbanism' was of course transferred to a very different cultural context in South Korea, and so its major concepts in turn came to be transformed – generating new patterns and methods to reconnect the

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[100] Grahame Shane, 'The Landscape Urbanism Reader', Charles Waldheim (ed.), *Terra Fluxus* (New York: Princeton Architectural Press, 2006) pp 23-33.

constitutive elements of the built environment. This chapter will therefore look at this process, and the kinds of projects which have resulted in cities like Seoul.

4.1 The Introduction of 'Landscape Urbanism'

An analysis of the current South Korean architecture scene tells us that it includes many architects who have received an international education and then come back to Korea. Learning experiences and architectural methods – especially from the United States and Europe – are thus being mixed with each other in South Korea. The road that these different architects now need to take to penetrate the Korean scene is also at the root of the country's opening up to the global architecture market, which has resulted in increased cultural exchanges with foreign architects. This has mostly been achieved by the latter winning international design contests in Korea, or through the work of consortia, or by independently invited architects. The diversity that has been achieved by Korean architects over the past 60 years is one for which is hard to sketch the full structure. It was not really until the mid-20th century that western modernism came to be adopted in South Korea, and even then it had to go through severe social and cultural tribulations. Up until the 1970s, modernity was always confronted by the difficult proposition of how to address the idea of being 'Korean'. It was not until the 1990s Korean architects came to have a more positive attitude toward the value of cultural difference with western countries. This cultural difference has since created new peaks on the horizon of the Korean architecture, drawing a new topography which parallels the real valleys

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and maintain ranges. The diversity of Korean contemporary architecture which has been achieved through this structure might seem overly rich at first glance, but exactly how healthy its diversity is remains a problematic question.

Since the start of this millennium, South Korean architecture has been heading in two prominent directions: one which argues that the boundary of architectural activities is no longer limited to the national level, but should be expanded an opened up fully to the globalised world, while the other argues that traditionally independent disciplines such as architecture, urban design and landscape design should make steps toward integration. Accordingly, even the method of defining architecture in South Korea has changed greatly in the last decade. Such phenomena can now be witnessed simultaneously in many areas. First of all, given that the design of major buildings has been increasingly decided upon by international competitions over the past five years, South Korea has suddenly emerged as an important market for the global architectural community. Most world-renowned architects have now participated in Korea-related projects at least once, and this also signifies that South Korean architects can often compete directly with them. Along with this, it is notable that most of the projects which have won these competitions feature similar architectural tendencies. This is evident from various projects, ranging from the Nam June Paik Museum (2003), Ewha Woman's University Campus Centre (2004), Asian Culture Complex in Kwangju (2005), Jeongok Prehistory Museum and the New Administrative City (2006). On top of this, the restoration of the Cheonggyecheon river and the rapid construction of Paju Book City and Heyri

Art Village, both new towns outside Seoul, also have a common denominator, and one which has tried to organize architecture and urban infrastructure within a new kind of ecosystem. Although they represent distinctive design approaches in themselves, depending on the nature of the respective projects, ultimately they all revolve around a tendency which is commonly known as 'landscape urbanism'. As Grahame Shane has written of how 'landscape urbanism' came to criticize the existing approaches of its time:

> The emerging practices surrounding landscape urbanism offer many lessons for urban designers wanting to link structures to specific flows of populations, activities, construction materials, and time. The greatest strength of these practitioners lies in a determination not to accept the readymade formulas of urban design, whether "New Urbanist" or "generic" urbanist mega forms a la Koolhaas. Landscape urbanists want to continue the search for a new basis of a performative urbanism that emerges from the bottom up, geared to the technological and ecological realities of the postindustrial world. This implies an opportunity to open urban design out beyond the current rigid and polarized situation to a world where the past building systems and landscape can be included as systems within urban design. Designers recognize and play with these morphologies that are traces of human habitation, creating layers of meaning for current production.[101]

4.2 The Acceptance of 'Landscape Urbanism' and Its Misinterpretations

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[101] Grahame Shane, "*The Emergence of Landscape Urbanism*", in <u>The Landscape Urbanism Reader</u>, comp. and ed. Charles Waldheim (New York: Princeton Architectural Press, 2006) p 65.

So why has 'landscape urbanism' been so generally well received by Korean architects? Most of all, this seems to be because it tries to embody an intimate relationship with nature. Prior to the era of 20th-centry modernization, the central issue within Korean architecture was always how to integrate buildings into the surrounding nature without disturbing the overall sense of wholeness. This reflected the quiet spiritual and cultural ideal of Korean people, who have generally wished to lead a free and quiet life in tune with nature. Therefore various human and geographical theories, such as the Korean vision of *Feng Shui*, were developed historically.

> In the traditional Korean architecture, a house is a cosmos where there is no separation of substance, space, time, people, and nature. So, in the past, our ancestors pursued the identical principle of life where there is no identification of architecture, people, and nature rather than how they are related to each other and how to achieve harmony. To them, a house had to be a unified cosmos that is composed of the same principle. In such a process of unification with the cosmos, architecture was not intended to harmonize with nature, but it was to achieve the state of nature, and achieve the world of civilization that makes nature abundant. That is the state of completing nature, where architecture and nature can be in place for each other. Here, the ready explained typical beauty of forms, space, and time such as simple classic symmetry, uncomplicated refinement, sense of nature that has reached harmony are a little short of explaining Korean beauty.[102]

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[102] Kai-chun Kim, *Space of Bright Silence* (Seoul: Yonsei University Press, 2004) p 66.

However, it is also clear that the kinds of natural forms and landscapes discussed in contemporary 'landscape urbanism' are totally different from Korea's traditional ideas about nature. In 'landscape urbanism', nature is considered to be a controllable surface that can be manufactured where needed. Thus the intention of 'landscape urbanism' is to inscribe a configuration of the ground as an artificial surface, thereby allowing various events to take place on it and within it. This type of scheme is effectively demonstrated in the prize-winning project for the Paik Nam-Jun Museum. Here a German architect, Kirstem Schemel, had the intention of spreading a kind of matrix – which she described a 'lace of light' – to make the most of the geographical twists and bends in the site. Moreover, the design was also intended to create an embedded environment through the use of various kinds of digital technology. In this sense, 'landscape urbanism' can be viewed as a very western concept that tries to manipulate nature according to humans' wishes. And in this sense such ideas are exceedingly different from the definition and the relationship with nature that Korean people have traditionally favoured, since they see nature above all as an object of contemplation and leisurely relaxation. This dilemma about the definitions of nature, and whether hybridity is inherent in 'landscape urbanism', is a topic that many writers have touched upon:

> The issue of boundaries is also relevant in revisiting the question of the separation of humans from nature and the confusion in discussing the urban landscape often caused by equating "landscape" with nature or naturalness-this in spite of the ongoing and explicit manipulation and construction of the urban landscapes we

inhabit. We see the ubiquitous creation of mediocre naturalistic pastoral

landscapes across every urban or suburban condition. In contemporary discussion

the difference between natural landscapes and human landscapes is much less

clearly defined. In parallel with this has been the development of the field of urban

ecology, the investigation of the characteristics of the plant and animal

communities in the urban landscape, subject to natural processes but profoundly

shaped by the impact of humans and development. This has led to new design

strategies that are based on an acceptance of the disturbed and hybrid nature of

these landscapes and the idea that landscape design can be instrumental in

working with natural processes to make new hybrid ecological systems.[103]

This point being made, it should be said that in terms of its design process, if

not general its intentions, 'landscape urbanism' can be seen as being closely

associated with Korea's traditional way of controlling nature. For instance, the

two primary ways of seeing the world – to 'view' and to 'gaze' – are important

concepts within 'landscape urbanism', and as well as being vastly familiar to

Korean architects from the outset. When one visits Korea's traditional temples,

one immediately notices that their visual effects are constantly changing to

adjust to the layout of buildings. For instance, the principle of visual harmony

was the most important factor in determining the actual sites of temples.

Surrounding mountains often acted as a natural boundary, through which often

highly artificial places, differentiating themselves from the indigenous natural

environment, could be created.

[103] Elizabeth Mossop, "*Landscapes of Infrastructure*", in *The Landscape Urbanism Reader*, comp. and ed. Charles Waldheim (New York: Princeton Architectural Press, 2006) p170.

Korean beauty, unlike the beauty of a form or a room, is beautiful like nature, and

nature is time and space. It is also of no space as much occult as the mystery of

cosmos. Instead of creating a form or a room, it was an establishment of

relationships that empty forms, the system that contains nature and life, and

frames that build up in nature. Also, by pursuing the state equal to nature, it

pursued the state of divinity that creates the wonders of heavens as humans.[104]

In addition, whenever one enters the perimeter of a Korean temple, one finds its

landscape is gradually combined with the idea of separated scenes. The

unfolding of these scenes is kept in order visually through the trimming

frameworks of gates and pavilions that frame each scene. Through this process,

the interaction of the 'view' and the 'gaze' plays a very important role in

allocating the position of the actual buildings. When one reaches the final

destination through a continuous sequence of walking, climbing, and viewing,

another kind of visual effect awaits the visitor. This takes the shape of looking

out over the breathtaking natural scenery, but now viewed from a 'higher' place

in both senses of the word. Accordingly, this traditional method of ordering

nature into constructed space has many similarities with 'landscape urbanism',

in that the latter also attempts to create a continuous surface by the folding

together of several layers of building.

Hence, 'landscape urbanism' tries to integrate the interior of a building and the

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[104] Kai-chun Kim, *Space of Bright Silence* (Seoul: Yonsei University Press, 2004) p 66.

external surroundings into a single surface: these occasionally intrude upon

each other in certain projects like a Mobius Strip. This again explains why this

tendency appeals so much to Korean architects. Those promoting 'landscape

urbanism' often criticise every trend that has emerged since 1920s modernist

architecture, which they claim switched its attention to architectural aspects on

the inside of buildings, resulting in a total segregation between the interior and

exterior spaces of the building. This situation was later exacerbated as clients of

modernist buildings sought maximum profits by developing their own sites.

Under these circumstances, the idea of a truly public use of architecture and

urban design has disappeared under 20th-century western capitalism. As cities

have instead become filled with what can be seen in Korean terms as extremely

'selfish' buildings, urbanistically, new techniques to integrate them more

organically have become a necessity. As Shane notes:

> The Landscape Urbanism movement embodies many of Lynch's global, regional,
>
> and ecological concerns.[105] Designers such as James Corner of Field Operations
>
> plan the time dimension of the city landscape as a series of plant successions,
>
> often to remediate industrial brownfield or polluted sites (as in Corner's Freshkills
>
> Park competition entry of 2003 for Staten Island, New York). Within such layered
>
> ecological landscapes, designers envision new patches of activity or "commons,"
>
> public spaces shared by urban actors. Such a space is used on a temporary basis
>
> with the consent of other actors for specific events such as seasonal religious

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[105] Lynch's emphasis on large-scale thinking has continued in Landscape Ecology and in the emerging Landscape Urbanism movement, which looks broadly at the organization of industrial society and its use of natural resources as constituting an urban landscape far beyond the scale of the traditionally bounded European city.

rituals, fairs, carnivals, and sporting or promotional events.[106]

This is the precise reason why 'landscape urbanism' puts such an emphasis on the urban void, and on redeveloping wasteland, precisely to try to restore the public nature of architecture. To this end, a sort of in between space that can connect various buildings, and thus can alleviate their urban 'confrontation', is suggested by the new approach. This idea of the urban void, albeit notionally empty, suggests a space full of raw and huge potential in that it is closely connected to adjacent buildings, and thus with the potential to generate various events and activities that can reunite urban space.

4.3 Restoring the Landscapes of Infrastructure: the Restoration of Chonggyechon, Seoul

This relationship between natural systems and the public infrastructure of the city begins to suggest a means of developing urban strategies through the development of networks of landscape infrastructure related to ecological systems. The starting point is that the most permanent and enduring elements of cities are often related to the underlying landscapes - the geology, the topography, the rivers and harbours, and the climate. This does not mean a denial of the realities of globalization or the influence of technology, but recognition of the importance of place and of connection to natural systems. There is an obvious synergy between

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[106] Grahame Shane, "*The Emergence of Landscape Urbanism*", in <u>The Landscape Urbanism Reader</u>, comp. and ed. Charles Waldheim (New York: Princeton Architectural Press, 2006) p 63.

the need to create networks of open space to serve social needs and new

approaches to open systems of urban water management.[107]

Why is public space design so important in urban life? This is an issue I will

investigate in relation to the restoration project for the Cheonggyecheon district

in Seoul because it contains history of modernist universal ideas and demands

what sort of new flexible ways we need for creating public space. The

restoration of Cheonggyecheon proposes the creation of open public space to

create a pedestrian-orientated city. It mainly focuses on the infrastructural in

'landscape urbanism'.

Explorations in landscape urbanism have focused on infrastructure as the most

important generative public landscape. In the course of the twentieth century we

have seen the increasing standardization of infrastructural systems as they meet

higher standards of technical efficiency. Landscape urbanism also suggests that

this happens by an instrumental engagement with ecological processes as well as

with the function of infrastructure and the social and cultural needs of the

community. The strategy is an attempt to make the necessities of dealing with

human impact a part of the making and generation of urban landscapes.[108]

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[107] Elizabeth Mossop, "*Landscapes of Infrastructure*", in <u>The Landscape Urbanism Reader</u>, comp. and ed. Charles Waldheim (New York: Princeton Architectural Press, 2006) p 172. There should be a relationship between the underlying structures of topography and hydrology and the major structuring elements of urban form, such as the use of catchments as the basis for physical planning and regulation.
[108] Ibid., p171. These ubiquitous urban environments have been considered and evaluated solely on technical criteria and somehow exempted from having to function socially, aesthetically, or ecologically. Designers need to engage with this infrastructural landscape: mundane parking facilities, difficult spaces under elevated roads, complex transit interchanges, and landscapes generated by waste processes.

4.3.1 The Restoration Project of Cheonggyecheon

Figure 4.1: The restoration project of Chonggyechon.[109]

This Chonggyechon project is really a 'restoration' work not a newly created

river, not least because fresh water is now actually being pumped in the river to

ensure it is clean – and so it has been called a 'fake' by Korean

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[109] The total project scope of the Restoration is the total length of the Cheonggyecheon 5.84km. The area and the length to be demolished are – Sami Building-Majangdong Rotary (L=5,043m) and Jujadong- Janggyodong (L=871m) for the Cheonggye Expressway, Mugyodong-Majangdong (L=5,394m) for the covered road, 4 Cheonggyero and 2 Samilro walking overpasses. In addition, Sewage box (L=300m) and Chatijipgwanro (L=4,950m) of the sewage pipes will be dismantled. Image source: Source: http://www.metro.seoul.kr/kor2000/chungaehome/en/seoul/main.html.

environmentalists. The restoration project of Cheonggyecheon aims to revitalize the 600 year-old historical identity of Seoul which had been neglected by the rapid economic development and restore the historical value through rediscovering the values of the history. The restoration of the Chonggyechon district can be seen as not just Seoul's problem, but as a national necessity as this key point in the early-21st century. If the Chonggyechon project succeeds, Seoul may change into environmentally-friendly, human-centred city space. It could be an opportunity for Seoul to guide a new paradigm of 21st-century urban administration, as well as succeeds renovating Seoul's image. Hence the Cheonggyecheon Restoration is a project that is being undertaken to change the image of Seoul, not so much in terms of its revitalising the developmental perspective, but for the ecological significance that seems to suit current cultural interests. The project relies upon what needs to be done in the future, of which its prospects include the coexistence of man and nature, and a more balanced development of the urban districts south and north of the Han River. The project symbolizes Seoul's desired progress towards being a community where social life and environment are at last valued as a core essence, reaching beyond the 'restoration' aspects to create an 'urban environment worthy of the living'.

4.3.2 History

The original name of the Cheonggyecheon is '*Gaecheon*', meaning "Open Stream", and the sources of the river are Inwangsan Mountain located to the northwest of Seoul, and the southern foothills of Bugaksan Mountain. The

Chonggyechon river basin has long interacted with politics and society; it is a symbolic boundary line that divides culturally as well as geographically, ever since Seoul was selected as the capital of the Choson Dynasty in 1394 (the gross area of the city centre was then 50.96㎢).
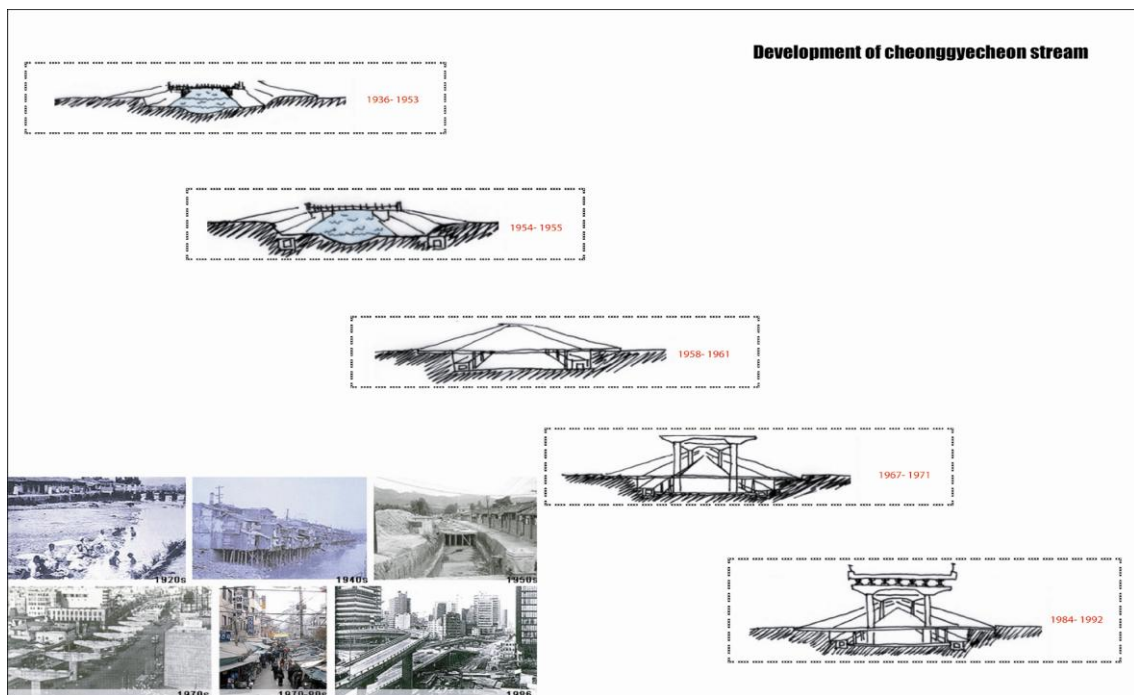

Figure 4.2: Development of Cheonggyecheon stream.[110]

The Chonggyechon river has also long presented a danger to the city inhabitants, especially as river flooding was a constant threat. This proved especially serious in regard to riverside hygiene problems. Whenever localized downpours happened, sewage in the Chonggyechon would flow into the congested residential areas nearby. The mortality of Seoul inhabitants was therefore particularly high if they happened to live adjacent to the

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[110] Source: http://www.arch.mcgill.ca/prof/mellin/arch671/winter2004/student/Lee/assign9.html.

Chonggyechon stream. The simplest method to solve this problem, yet one that was to have a seriously negative impact on the visual spectacle of Seoul, was one known as *Bokgae* (i.e. covering over the river). By the late-19th century the situation had become bad that one of the flagship projects of the Korean Empire at the time was to redevelop the stream. Through a government ministry order in 1895, the Chongno plan to implement a street-widening project was announced, and construction began. Following this start, the Chonggyechon *Bokgae* works started on 25th May 1958 and were completed in December 1961, by which point the first stretch of the stream was covered over. Then, from 1965 to 1966, the area between Ogansu Bridge, Dongdaemun and Cheonggyegyo 2 was also covered, and the extension construction up to Majang Steel Bridge was completed by 1978. After the covering of the Cheonggyecheon stream, many stores clustered along both sides of the road above, and the amount of traffic skyrocketed. The necessity was for new roads that could provide a detour the central downtown area of Seoul, and so a new overpass over the Cheonggye Road was built. It only added to the urban problems.

4.3.3 Crisis of Modernism

More than 65,000 vehicles now pass over the covered roadway of Chenggyecheon in Seoul everyday, while the local Expressway handles more than 103,000 vehicles per day. Such an excessive amount of traffic passing through these roads is causing an urban transit nightmare, with serious air and noise pollution along with major safety problems arising from the ageing roads.

Figure 4.3: Before Restoration of Cheonggyecheon stream.[111]

Figure 4.4: After Restoration of Cheonggyecheon stream.[112]

There are now approximately 6,000 buildings for business, retail, residential

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[111] Source: http://cheonggye-seoulsgem.blogspot.co.uk/2011/12/1.html.
[112] Source: http://www.metro.seoul.kr/kor2000/chungaehome/en/seoul/main.html.

uses in the Chenggyecheon area, and its categories of businesses include clothes/fashion industries, household goods, appliance tools, electronics, and even fire-fighting equipment. Although the area has been developed on the basis of designations set up by Seoul's City Management Planning Department, in relation to the City Redevelopment Planning scheme, a decrease in developmental value and competitive power since the 1970's are not helping the district. As a result, a series of small buildings of aged 40-50 years old have been left empty and redundant in this area. The post-industrial tendency has caused the gradual decrease in the local population to just 50,000 citizens, with a daily working population of 80,000 made up by commuters.

4.3.4 Cheonggyecheon Restoration – Necessity in Value

There was downtown heavy traffic, as the result of excessive traffic. Air pollution and noise pollution were both serious. There was depreciation of historical relics in the area. The number of head offices for businesses was only 63% of the level south of the Han River in Gangham, and its weak industrial structure meant it was also becoming uncompetitive in that sector also. The area had been much dilapidated by the long period it had taken to redevelop and cover the stream.

The Cheonggyecheon Restoration project was therefore intended to resolve these problems of this post-industrial area, and to protect the citizens of Seoul from the existing and ageing road system. According to the detailed safety

analysis conducted by the Korean Society of Civil Engineers in 1992, repairs and reinforcement were urgently needed for the Cheonggyecheon Expressway, and by 1997, the use of the road by vehicles other than passenger cars had to be restricted. From further analysis of the covered roadway over the stream in 1999, it appeared that the 30-year period of use had already put the road into an exhausted condition, thus requiring not only a comprehensive project of repair and reinforcement, but also a thoroughgoing policy of maintenance and management after the work had been completed. It became evident that the alternative safety measures were urgently needed, not least because conditions have been worsened by the presence of sewer gas generated from the river bed of the Cheonggyecheon stream that caused the covering road slabs to become corroded, risking erosion and even structural failure in the future.

The second issue for the Cheonggyecheon Restoration project was how to make an environmental improvement. Ever since the Hansung Era during the Chosun Dynasty, Cheonggyecheon had been the most important sewer line as well as the main waterfront in Seoul. The stream always had a dilemma in trying to keep its water clear while also playing its role as the sewage line for the city. Over the years, its role as a sewage line has been by far the stronger, putting at risk the lives of citizens due to hazardous materials such as lead, chrome and manganese, as well as air pollutants such as carbon monoxide and methane that accumulated over a long period. The new project from the 1990s thus aimed to revive the Cheonggyecheon so that it would become a stream which has an abundance of sunlight, fresh air and clear water, thus providing the

citizens with a space where there is a natural ecological landscape. The

intention is to provide a place of pleasant relaxation within the urban setting, so

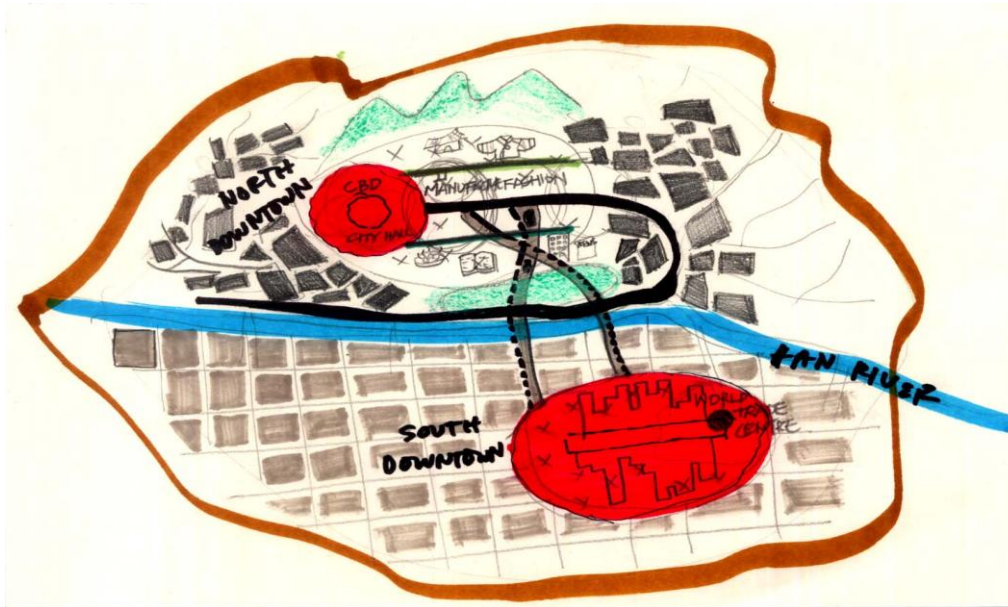as to allow mankind and nature to co-exist in an environmentally-friendly city.

Figure 4.5: Urban fabric – North downtown and South downtown.[113]

As mentioned, Cheonggyecheon is a place where the historical legacy of Seoul

and its traditional customs and culture have been very much alive throughout

the years. It is a place not only for the city's servicing substructure, but also one

with numerous memories and historical records. During the covering work,

those kinds of memories and legacies were buried without a trace underneath

the concrete columns and slabs. The Restoration Project thus also carried an

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[113] The project intends to lead in reforming the area's outdated industry infrastructure due to the 50 years of deferred development since the nation's independence, and to revitalize the local economy. In addition, it allows the place to become a likely prospect for the future industrial sector, while contributing to the economic growth of the northern region of Seoul in order to level the current City's unbalanced growth that is focused more in the southern region. Image source: http://cheonggyecheonrestorationproject.blogspot.co.uk/p/design-devlopment.html.

essential obligation to recover historical remains such as the Gwangyo and Supyogyo Bridges,[114] and thereby help to revitalize traditional customs. Through a strategic plan to link the new project with other cultural assets that remained with within what had historically been the four gates into Seoul, the city's 600-year old cultural heritage and its lost identity could begin to be re-established. The Cheonggyecheon Restoration is thus also an opportunity to recreate the area as Seoul's primary cultural tourism resource.

4.3.5 Strategy of the Restoration

The purpose of the landscape is to materialize an urban ecosystem that is orientated towards a reconciliation of humans and natural elements. The newly uncovered stream offers a symbiosis of city and nature by increasing the amount of greenery in the city, while providing water-friendly activities. In addition, the plan intends to maintain the stream as a self-sustaining ecosystem so that it will continue to provide a pleasant and refreshing environment for citizens. The length of the Cheonggyecheon is being divided into three main sections, and conceived as a stream that transforms gradually from a more urban image (in its western part) to more natural area (in its eastern part).

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[114] Bridges will be laid out as they will correspond to historical character of Seoul and the area's development concept. There will be 14 vehicle crossroads running in north-south direction, while 5 Pedestrian Walk will be provided along the pedestrian path's juncture at overpasses and crosswalk. Some will be planned as mixed used roads for cars and pedestrians in case the future development requires connections to existing local streets. Total layout concept of the bridge represents the time flowing from west to east direction. In other words, from the Starting Point up to the 10th bridge will be represented as "Bridges of History", the middle portion of 11th-17th bridge as "Harmony of Old and New", and from the 18th to the last bridge as "Bridges of Future".
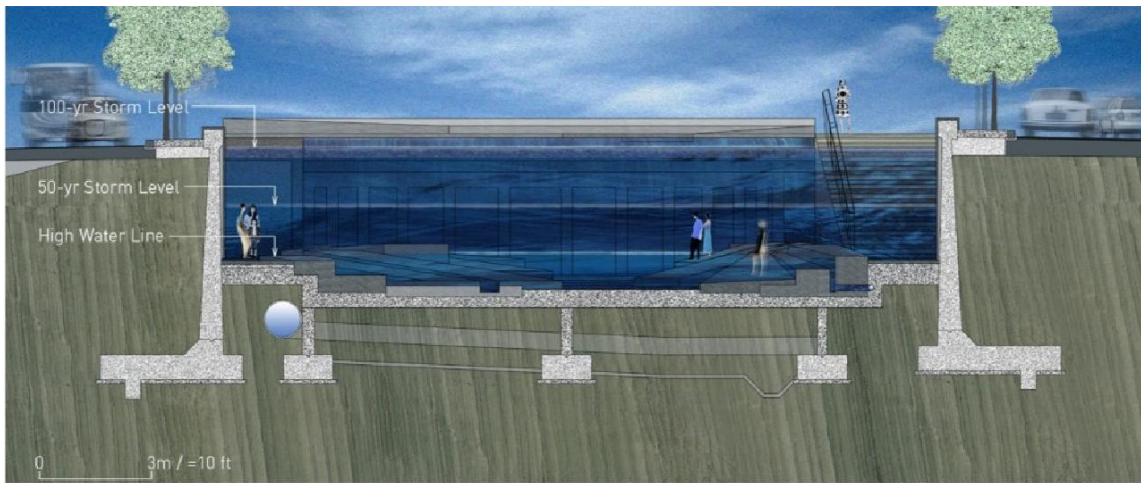
Figure 4.6: The conceptual site plan and sectional plan.[115]

4.3.6 Influence of the Restoration

Any major restoration project within an urban setting requires a very different

approach to those projects where the new area has been selected for

development. The process of rearranging and redesigning an area already

stabilized with certain lifestyles is likely to involve endless interest groups and

people's actual lives. In short, there is a real problem is destabilizing an existing

network of human relationships that has already settled in terms of its intricacy.

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[115] Theses were presented in 2002 by the Research Center Director of the Seoul Development Institute, Seoul Metropolitan Government. Image source: Plataforma Urbana, http://www.plataformaurbana.cl/copp/displayimage.php?pos=-2419.

Urban redevelopments are often projects of the kind in which urgent social demands drive the process without any real long-term vision, reminding us how painful it is for citizens to experience the consequences generated by these types of planning decisions made with no real vision in mind.
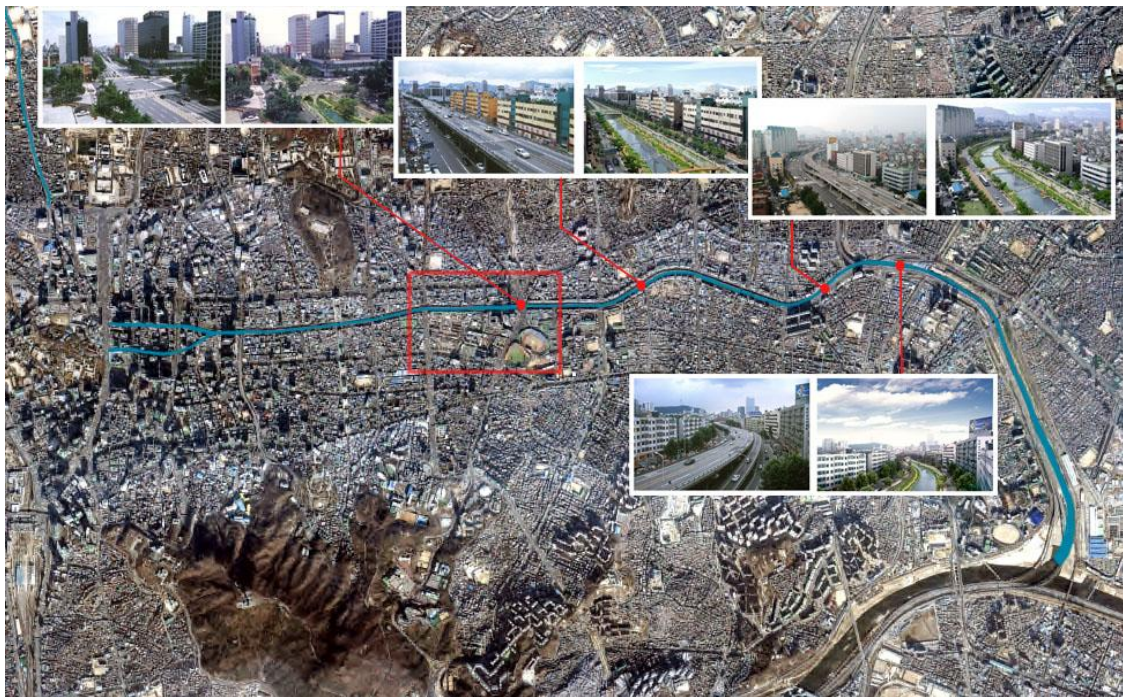

Figure 4.7: This urban stream flows from west to east converging in the centre of Seoul.[116]

As well as creating a synergic effect of new urban waterfront spaces through the Cheonggyecheon Restoration, the development plan for the surrounding area aims towards strengthening the local economy through the idea of an industrialized city. The proposal hence suggests that the revived urban structure should link the city's water routes to a green axis, in order to improve the environmental infrastructure. Thus, there is to be continuous pedestrian network

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[116] Source: http://www.arch.mcgill.ca/prof/mellin/arch671/winter2004/student/Lee/assign9.html.

established through the Cheonggyecheon area, along the stream, with new landscaping, and from which specific pedestrian and traffic flows will centre on the redesigned Sewoon Arcade.

Cheonggyecheon Restoration is thus a project that intends to change the urban atmosphere of Seoul at an enormous scale. It is also highly political project that was launched by the Mayor of Seoul at the time so as to give him a more ecologically-friendly image. Although the project's hopes after its completion lie beyond our imagination, there remain a number of issues that still need to be resolved. The biggest concerns have been in finding alternative sources of income for the vendors and small shopkeepers who are dotted around the area, and how to deal with the large current traffic flow. On both sides of the Cheonggyecheonro, an enormous volume of commercial building has been formed, with more than 60,000 shops to employ 200,000 workers. Yet for those who have long made their lives by working in the area, the Restoration Project does not sound at all attractive. They have been working there for more than 20 years, maintaining tight social relationships among themselves and often they have a strong sentimental attachment towards the area. For such people, the Restoration is a life-threatening event that brings uncertainty to their futures. The city hence had to provide a resolution for the problem. Alternative trades for the existing merchants, as well as minimizing the possible negative ramifications to their commercial rights, had to be negotiated carefully. In order to compensate for the loss of sales loss and traffic discomfort, it will be necessary to provide more working and parking spaces, and assurance of a

good site where their houses will be relocated to.

4.4 The Projects of 'Landscape Urbanism' in South Korea

Cultural nation, cultural people, cultural city, and cultural citizens: these are expressions no longer unfamiliar to people in South Korea. However, 'culture' is notoriously a term that defies easy definition. It is the result of the holistic coming together of a myriad of tangible and intangible elements of the era, including time, space and people's sensibilities. Ever since Korea allowed freer scope to its provinces and major cities to stamp their own identity, many of them have conspicuously come up with 'cultural' urban projects and policies. Since when has culture been so important to South Korea? What will South Korea cities look like with all these new 'cultural' elements embedded in cities? This section will address these questions by looking at a range of projects which all fit into the 'landscape urbanism' tendency.

> Acknowledging that the words such as city and landscape are the terms used the
>
> most frequently by today's architects practicing in London. Ironically, their concerns
>
> and efforts towards the new paradigm confirm to be the ones that we Koreans
>
> once had to forget, thinking that they were old and outdated. There are the very
>
> words[117] us Koreans were supposed to have thrown into the discard a long time
>
> ago. Back in those days when the awaking sound was the loud propagandizing

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[117] A group of Barcelonese architects led by Bru has suggested the following alternative keywords to contemporary architecture: Void, Multi-Readability, Vacant Space, Gaps, Niches, Relation between Body and Space, Landscape.

music of redevelopment coming from local offices, the void, the vacant and the

obscure were all deemed obstructive to economic prosperity. The sole prevailing

value was that with clear, physical objectives. It is quite ironic that our old, trashed

ideas are now viewed in the West as impetus of a new paradigm for the new age. It

is doubly ironic that the device of master plan, nowadays abandoned by its

Western creators and followers, still holds a heavy influence on the construction of

our city.[118]

4.4.1 Project Highlighting an Infrastructure-based Approach

The concept of fusing architecture with infrastructure in cities is one of the key

dreams of 'landscape urbanism', as Elizabeth Mossop writes:

Landscape is also used to represent and understand the dynamic systems of the

city, and is increasingly perceived as the significant medium for city making.

Strategies have been developed that attempt to make ecological processes

operational in design, harnessing natural phenomena such as erosion, succession,

or water cycles in the generation of landscapes. Designed landscapes are thus

allowed to develop over time as can be seen in recent proposals for Fresh Kills in

New York and Downs view Park in Toronto. These proposals and others highlight

the way in which the landscape of infrastructure has become the most effective

means to explore the relationship between natural processes and the city, which is

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[118] Hyo-sang Seung, *Paju Bookcity Culturescape* (Seoul: Kimoondang Publishing Co, 2010) pp 21-25.

the integral factor in a truly synthetic landscape urbanism.[119]

Saemangeum Island City (2008 – 2018)[120]

The landscape infrastructural approach can be seen in the unbuilt project for

Saemangeum Island City in Jeollabuk Do by Florian Beigel, Phillp Christou and

London Metropolitan University Architecture Research Unit. The biggest

challenge of this project was to provide housing for 680,000 inhabitants over

twelve years and to resolve the issue of environmental problems during the

constructions. As the designers of this scheme pointed out:

Saemangeum Island City is a phased plan of 8 new islands. The design balances

maximum water frontage against the cost of building lake embankments. In the

interest of feasibility of land reclamation, the islands have been located and shaped

to take advantage of the lakebed topography. The experience of being on an island

and close to the water is an important urban design generator. The beauty of the

various bodies of water is fundamental to the attractiveness of the Island City.

Agriculture and agricultural research will form an important part of the spatial

programme. A global city is to be founded as a center for tourism, service

industries and international investment. The ambition of the competition organisers

is for the city to become a sustainable and vital city of co-existence in the regional

network of the Yellow Sea Rim. A sustainable energy concept for the city has been

[119] Elizabeth Mossop, "*Landscapes of Infrastructure*", in *The Landscape Urbanism Reader*, comp. and ed. Charles Waldheim (New York: Princeton Architectural Press, 2006) p165.
[120] Design team: Florian Beigel, Philip Christou and the Architecture Research Unit. Environment Consultants: Jonathan Cook - Environmental Advisor, Landscape Architect. Design period: 2007-2008. Construction period: 2008 – 2018.

envisaged.[121]

Saemangung was supposed to develop agricultural industry around the site and thereby attract tourists. This project is another example of the 'event city' parades which have been so popular over the last decade in South Korea. Even though it aimed to provide land through reclamation, it disregarded the fact that existing inhabitants in the area have long suffered from an environmental crisis. How can people possibly produce environmental-friendly products in what are polluted agricultural fields? Is Saemangung therefore truly an environmental-friendly project? The answer has to be that it is not, and the fact that it will not be implemented is probably for the best.
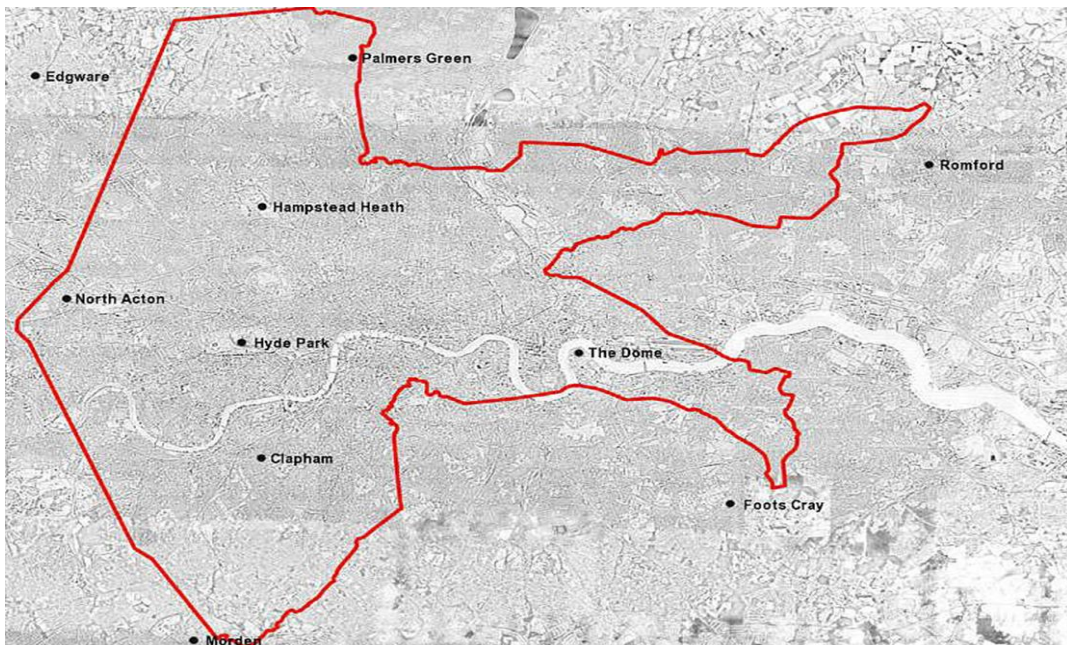
Figure 4.8: The scale of Saemangeum Island city compared to London map.[122]

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[121] Florian Beigel and Philip Christou, *Architecture as City Saemangeum Island City* (New York, Springer Vienna, 2010) p160.
[122] Image source: http://aru.londonmet.ac.uk/. Architecture Research Unit, London.

Figure 4.9: The scale of Saemangeum Island city.[123]

4.4.2 Projects Highlighting a Culturally-based Approach

Dongdaemun Stadium Competition Projects (2007)

On 13th August 2007 it was announced as major news that Zaha Hadid had won the competition for a project to transform Dongdaemun Stadium into a new park. Hadid's design, which was presented in various media under the theme of "Seoul's new landmark," seemed to provide a blueprint for the Seoul Metropolitan Government to establish a world-class park and design centre. This competition had included eight domestic and foreign architectural practices, namely Zaha Hadid, MVRDV, Foreign Office Architects, Steven Holl, Seung H-sang, Joh Sung-yong, Yoo Kerl and Choi Moon-gyu.

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[123] Image source: http://aru.londonmet.ac.uk/. Architecture Research Unit, London.

Figure 4.10: Architect - MVRDV – The Flex Park.[124]
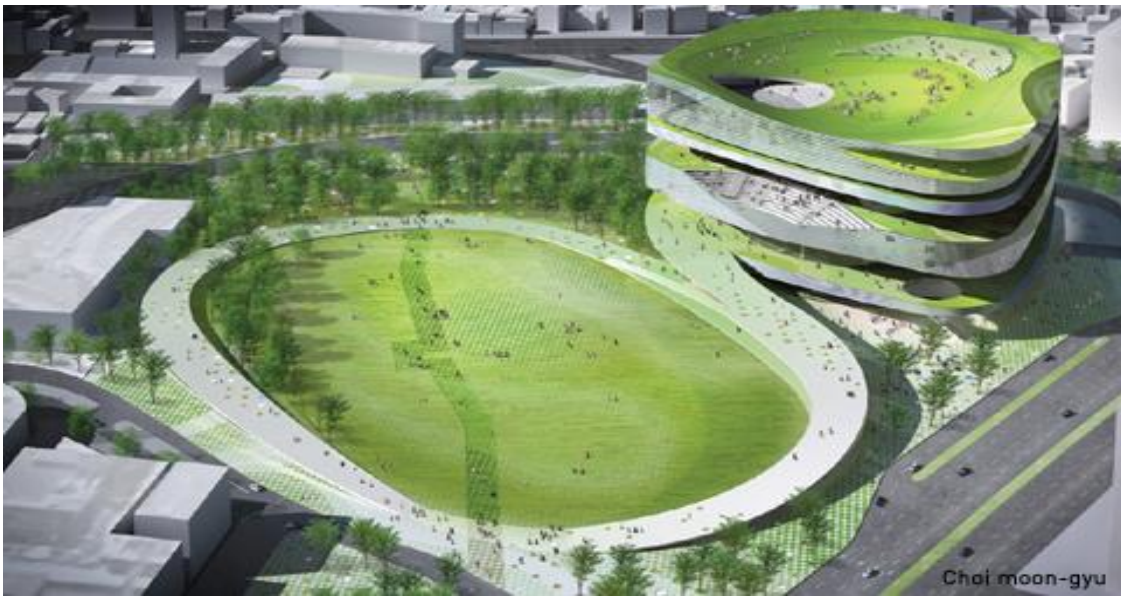
Figure 4.11: Architect - Choi Moon-gyu.[125]

The entries for the competition simply reconfirmed the fact that 'landscape

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[124] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 22. This project is not going to be built.
[125] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 23. This project is not going to be built.

urbanism' had become a major topic of concern for contemporary architects in South Korea, and it also raised many issues such as the evocation of the sense of placeness of Dongdaemun Stadium, a site where many development planning and concept projects have been conducted over the past ten years, all with high expectations for the so-called 'Bilbao effect' that would generate tourism, but which hasn't yet happened. The project won by Hadid required the use of the 61,585 m² site from the old stadium to create a new park, restore cultural assets including castle walls, construct a design plaza, provide usable underground space, car parking, etc.

Figure 4.12: Architect - Foreign Office Architects.[126]

Dongdaemun Design Plaza (2007-2014)[127]

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[126] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 25. This project is not going to be built.
[127] Architects: Zaha Hadid Architects. Local Architect: Samoo Architects & Engineers (Seoul,

In explaining why Hadid was chosen as the winner, a panel of judges that included Jonathan Barnett stated: 'Zaha Hadid's work shows a successful combination between the park and other constructions, sophisticated plastic forms, and strong & consistent images from various viewpoints.' However, it did not prove that easy to proceed with Hadid's project. Dongdaemun Stadium first needed to be removed; the Cultural Heritage Administration had to be consulted regarding the restoration of the Dongdaemun old castle walls; the merchants in the existing folk market needed to be relocated to other areas; and an alternative stadium had to be built. Hence plans for a (smaller) baseball field and the Cheonggyecheon Flea Market (its provisional name) were drawn up to show how the uses could be transferred to a site at Sinseol-dong.
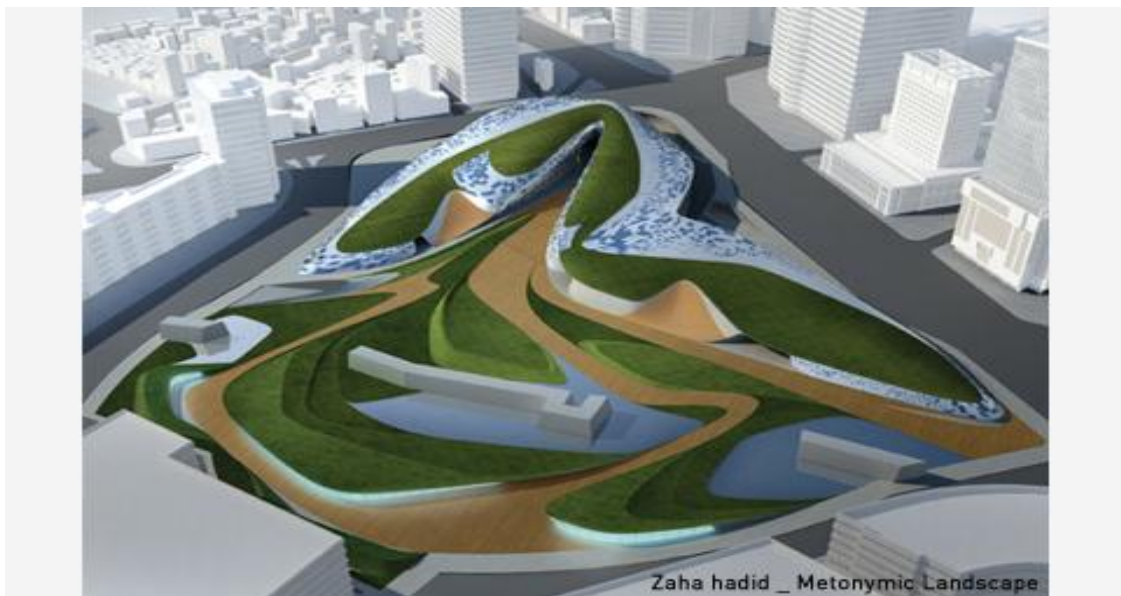
Figure 4.13: Dongdaemun Design Plaza design (2007).[128]

Korea). Location: Seoul, South Korea. Area: 89574.0 sqm. Design: 2007. Completion: 2014.
[128] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 114.

Figure 4.14: Dongdaemun Design Plaza completion (2014).[129]

One example of the strong local opposition to the project was a signature campaign to oppose the removal of Dongdaemun Stadium, right after Zaha Hadid was announced as a winner. The Joint Association to Oppose the Dongdaemun Stadium Removal and Preserve the Dongdaemun Stadium declared: 'It is not that we are totally against this project. Rather, what we are proposing is to preserve Dongdaemun Stadium for renovation and reusage.' However, given that the project has been already designed to include the removal of the stadium, and indeed to complete the project in 2014, the decision was already made: how to agree on what should happen to Dongdaemun Stadium remains the biggest dilemma for the project, although not one that Hadid is involved in.
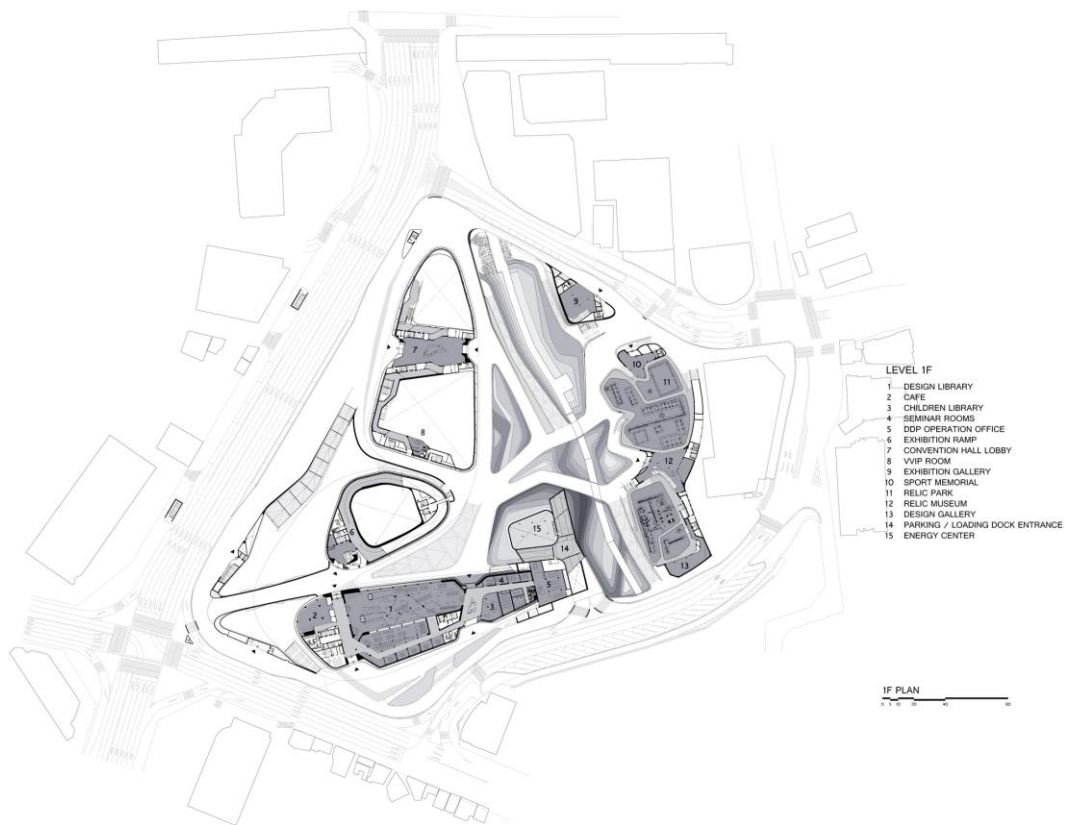
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[129] Source: http://www.archdaily.com/489604/dongdaemun-design-plaza-zaha-hadid-architects/.

LEVEL 1F

1 — DESIGN LIBRARY
2 — CAFE
3 — CHILDREN LIBRARY
4 — SEMINAR ROOMS
5 — DDP OPERATION OFFICE
6 — EXHIBITION RAMP
7 — CONVENTION HALL LOBBY
8 — VVIP ROOM
9 — EXHIBITION GALLERY
10 — SPORT MEMORIAL
11 — RELIC PARK
12 — RELIC MUSEUM
13 — DESIGN GALLERY
14 — PARKING / LOADING DOCK ENTRANCE
15 — ENERGY CENTER

1F PLAN

Figure 4.15: Dongdaemun Design Plaza level 1st floor plan.[130]
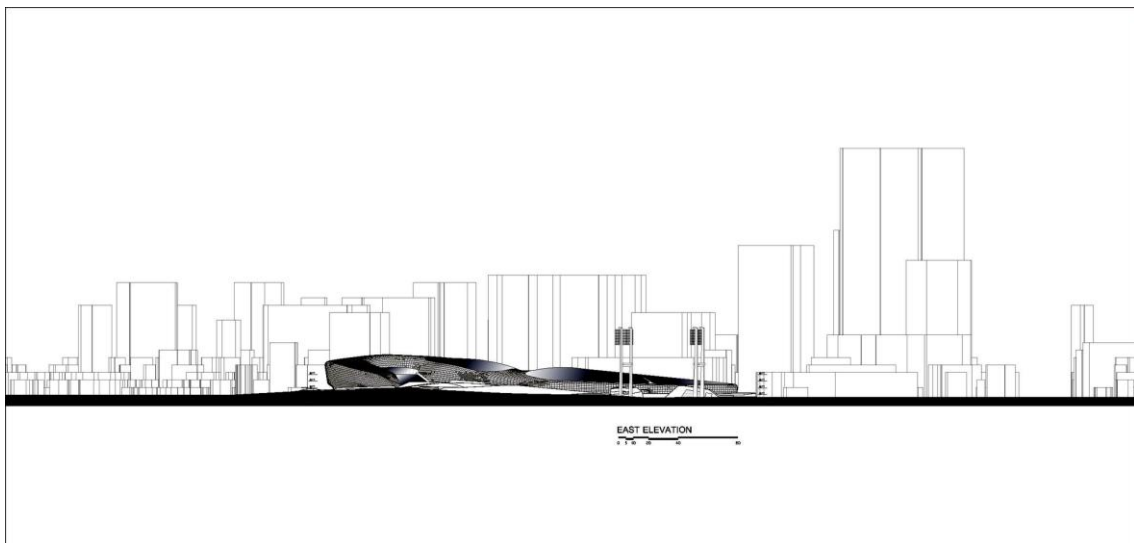
EAST ELEVATION

Figure 4.16: Dongdaemun Design Plaza East elevation.[131]

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[130] Source: http://www.archdaily.com/489604/dongdaemun-design-plaza-zaha-hadid-architects/.
[131] Source: http://www.archdaily.com/489604/dongdaemun-design-plaza-zaha-hadid-architects/.

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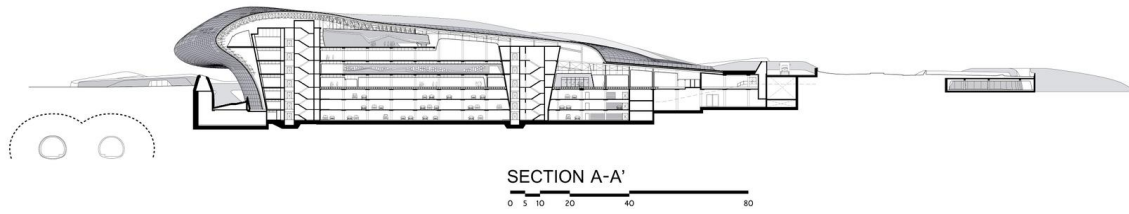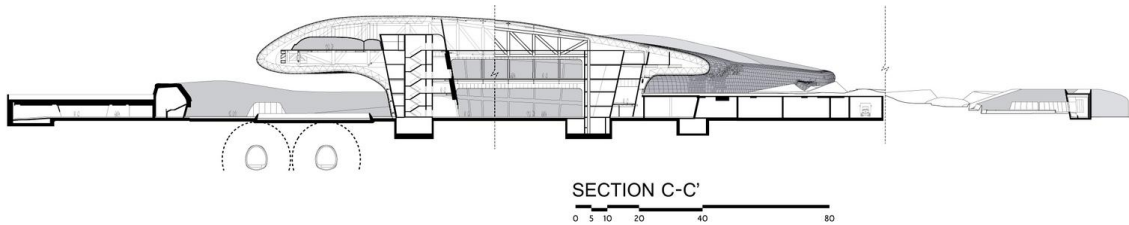
Figure 4.17: Dongdaemun Design Plaza section A-A'.[132]

Figure 4.18: Dongdaemun Design Plaza section C-C'.[133]

Asian Culture Complex (2006)[134]

Figure 4.19: Asian Culture Complex perspective view.[135]

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[132] Source: http://www.archdaily.com/489604/dongdaemun-design-plaza-zaha-hadid-architects/.
[133] Source: http://www.archdaily.com/489604/dongdaemun-design-plaza-zaha-hadid-architects/.
[134] Architect: Kerl Yoo, iARC architects. Aian culture complex competition project participation. Location: Gwangju, South Korea. Design: 2006. This project is not going to be built.
[135] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 113.

Elsewhere in South Korea, in the city of Gwangju, there is also the example of the Asian Culture Complex by Kerl Yoo. This competition brief called for contestants to design a complex that could 'manufacture' culture. The project entries hence started from the problems of this kind of brief. The Asian Culture Complex needed to be a place where new culture would emerge 'organically', rather than just being given to people by institutions. Emergence can only be achieved by maximizing the amount of social contacts: in other words, through a embrace of network complexity.

> Two distinct network organizations get emerged out of it; programmatic network (shopping, eating & drinking, learning, conferencing, showing & playing, working and living) and ecological network (park, water and wind). The interest is in generating urban capability of producing a flexible system that is dynamically adaptable, a creative system that can adjust itself freely to temporal events and urban challenges.[136]

As an urban strategy, the differentiation of the whole site into smaller parts has been executed by continuing the existing and neighbouring urban fabric, with these further being transformed by new programmatic insertions. The idea is that the parts will then later be connected with each other according to specific relationships between sub- programs, forming a complex 3D environment of

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[136] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 114. The differentiated connectivity of each network plays a vital role in modulating its emergent system. The question of what is culture and what is Asian will be constantly redefined and regenerated by means of this new urban system.

'nested' networks.

Figure 4.20: Asian Culture Complex plan.[137]

Jeongok Prehistory Museum (2006)[138]

Again, a different point of view is offered by the design for the Jeongok

Prehistory Museum in Jeongok, by Anouk Legendre and Nicolas Desmazieres.

As the designers of this scheme proclaim:

We wished to honor the riverside landscape that saw the birth of the first

inhabitants of Korea, and acknowledge the beauty of the curves of the two hills

[137] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 116.
[138] Architects: Anouk Legendre, Nicolas Desmazieres, X-TU Architects. Location: Gyeonggi-Do, South Korea. Design: 2006. This project is not going to be built.

echoing the meandering river. How can such a pre-existent form and its geological

underground chasm be enhanced? The precipice acts as a natural threshold and

the emotion thus it induces suggest a symbolic threshold into the prehistoric era

that will also give access to the prehistory park. Then Anouk Legendre and Nicolas

Desmazieres create many paths around the curves of the project and of the cliffs,

because the paths, which were made by nature, belonged to the landscape of the

first human beings.[139]
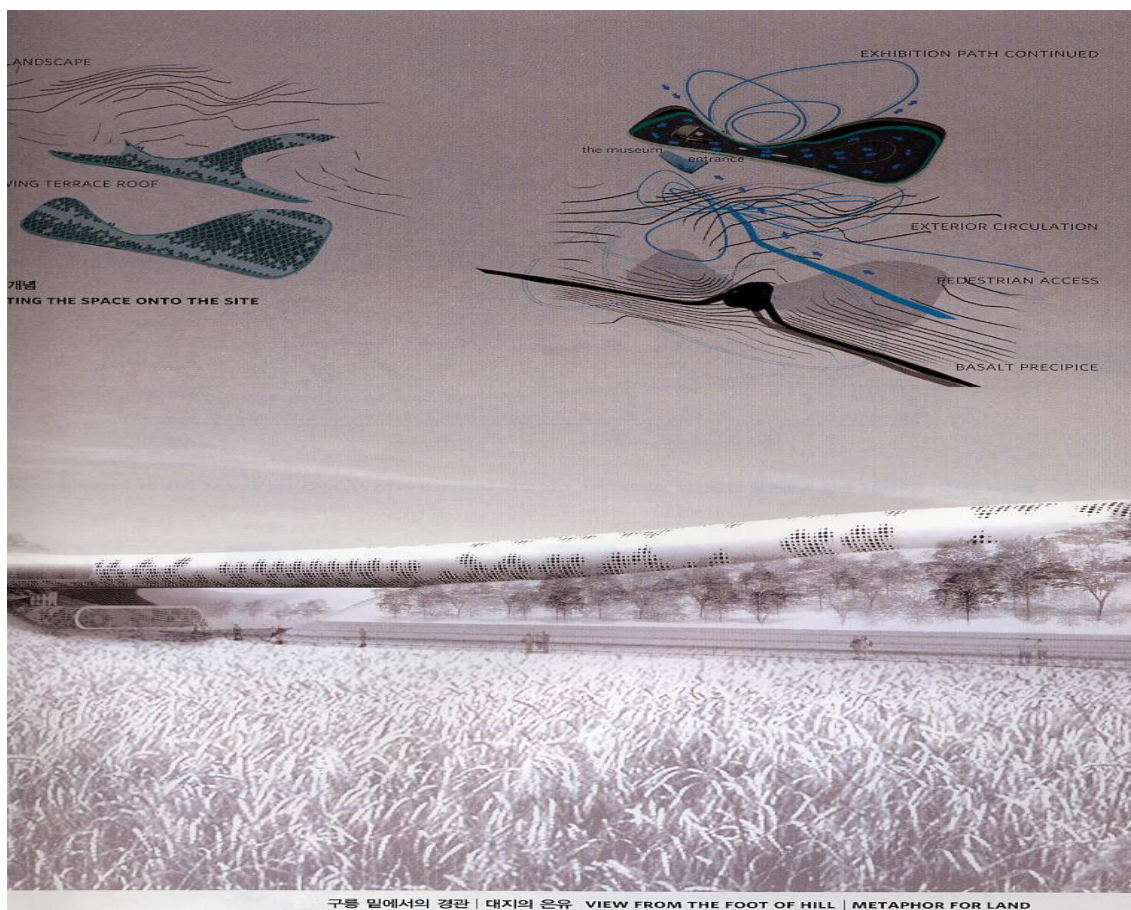
Figure 4.21: View from the foot of hill.[140]

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[139] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 58. The project appears like a bridge stretched between two cliffs that can be seen from the distant motorway.
[140] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 59. This project is not going to be built.
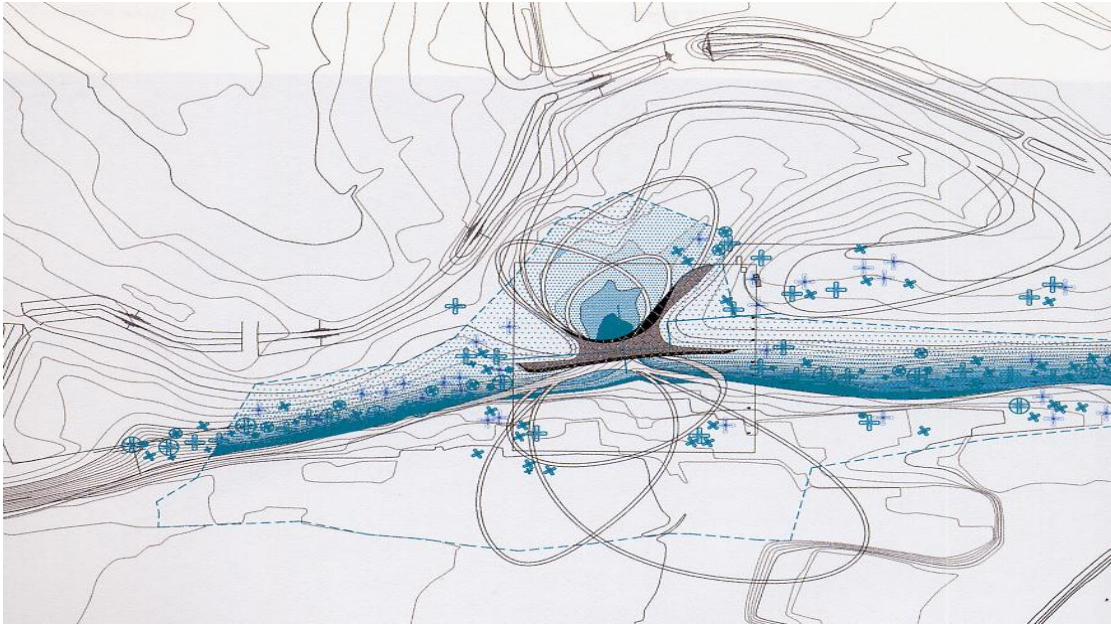
Figure 4.22: Inserting the site museum into an archaeological site of Palaeolithic era in Korea.[141]

4.4.3 Projects Highlighting an Arts-based Approach

Anyang Art City 21 (2005-2007)[142]

A project which takes an altogether different stance is the Anyang Art City 21 in Anyang city by MVRDV, introduced with much fanfare in 2007. Its ultimate goal is to turn Anyang, marred by negative perceptions following its rapid industrialization and modernization, into a far nicer place to live, full of culture and the arts. Hence what distinguishes Anyang's initiative from many other urban policies is its very strong emphasis on art. It squarely places art at the centre of its project, as the catalyst that will drive the movement and reach out to other financial and cultural sectors for collaboration.

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[141] Source: Source: Sang-Ieem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 60.
[142] Architect: MVRDV. Location: Anyang art park, Gyeonggi-do, South Korea.

Figure 4.23: The Anyang Art City 21 in Anyang city by MVRDV.[143]

The policy revealed its first tangible fruit to the citizens on 5th November 2005, in the form of the First Anyang Public Arts Project held in the resort area of Anyang. In an era when aesthetics or environmental concerns are taking centre-stage, the act of shaping urban life requires an appeal to the sentiments of the general public, not the elitist views of the ruling elite, as in the past. In this context, Anyang's art-based project is a truly meaningful attempt at city regeneration, and is likely to provide an important case study for other urban programs in South Korea in future.

> A path which is leading to a small peak is located on top of central summit in
>
> Anyang resort. One way to revitalize this area is to emphasize the natural wonders
>
> that are already. Nature could be intensified. A viewing tower is proposed,
>
> supercharging the hill into Anyang Peak. The path leading up the hill, an essential
>
> element of the park, is used as a tool to generate this idea. The spiral path
>
> becomes the tower, extending the hill seamlessly. Reshaping the peak. Two

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[143] Source: http://www.aaa.org.hk/Collection/Details/47897.

contour lines from the top were used to shape the path. One forms the outer spiral

and another one forms the inside spiral line. As these two contours offsets inwards,

the width of the path varies.[144]

Seoul Performing Arts Centre (2005)[145]

Yet another variant is the Seoul Performing Arts Centre in Seoul, by Andres

Perea Ortega. This project proposes an event that is stranded in the river, and

is surrounded by the flow of the river. Over many days, nights, months,

autumns, winters, springs, there will be multiple episodes of social, cultural,

religious, familiar, personal events. The project is hence conceived as an

enclosure for all forms of communication. These forms include: introspection,

interpersonal interactions, familiar or tribal affairs, and metropolitan/

cosmopolitan connections. And for this environment to be created, the

architects aim to provide systems adapted to information needs, using the

latest technologies, but starting from the traditional systems of direct relations,

or shared activities.

The project will be a state-of-the-art answer to the demands of a sustainable

environment. Architecture will use all natural resources in running the complex, and

its maintenance and transformability will be tomorrow's soft technology. The time

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[144] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 96. The minimal width which is 1.5m was the guiding line for these two contours. And the inclination of the path was fixed as 1/10 slope. A 146m long path with a four rings forms the 14.6m height peak which covers 160m² areas. The internal void acts as a pavilion; it can hold a small exhibition or installation. The space can also be used as a performance space, allowing visitors to look down on the stage on top of the hill. The path encircles the peak turning it into a destination.
[145] Architect: Andres Perea Ortega. Seoul performing arts centre ideas competition project 1st prize. Location: Seoul, South Korea. Design: 2005. This project is not going to be built.
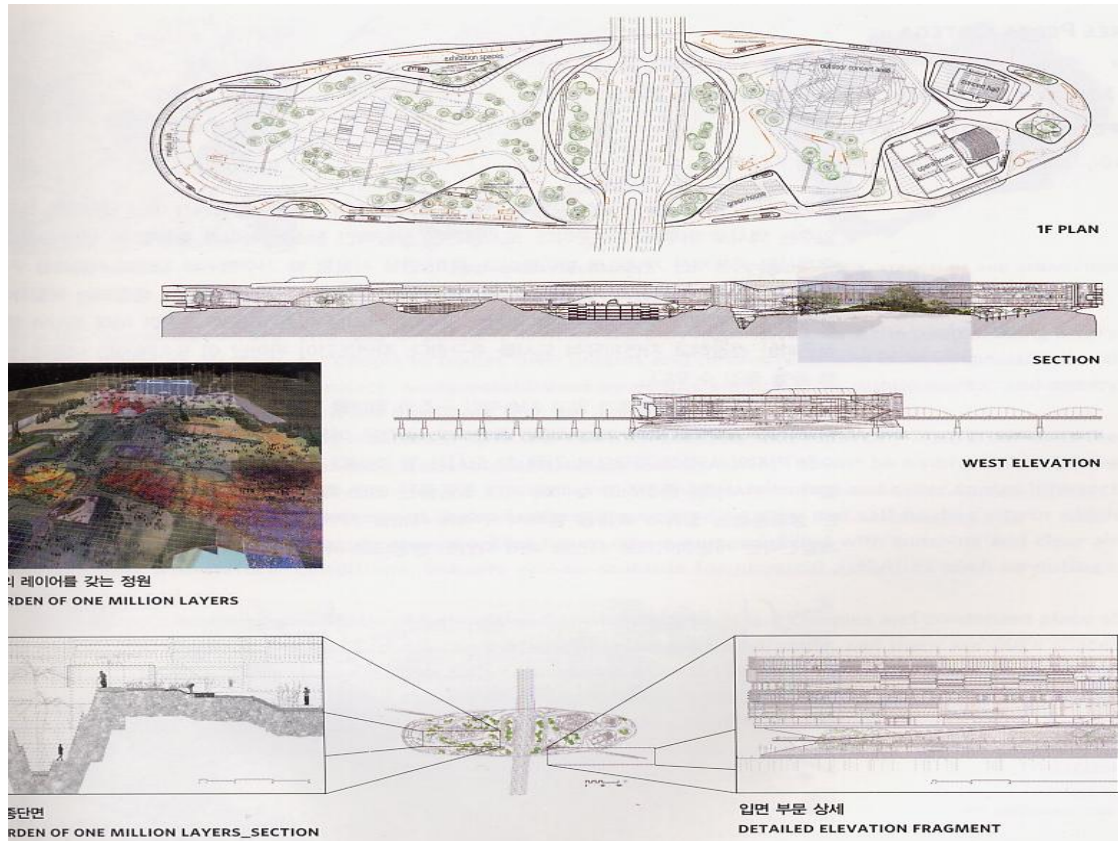
for lightness and flimsiness has arrived.[146]

1F PLAN

SECTION

WEST ELEVATION

의 레이어를 갖는 정원
RDEN OF ONE MILLION LAYERS

통단면
RDEN OF ONE MILLION LAYERS_SECTION

입면 부문 상세
DETAILED ELEVATION FRAGMENT

Figure 4.24: Seoul Performing Arts Centre.[147]

Multi-functional Administrative City (2005)[148]

With this aspiration in mind, it is worth looking at the design for a new Multi-

functional Administrative City in the city of Yeongi, by Andres Perea Ortega.

Through this project, the city is intended to be given a continual structure and

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[146] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 90. The kit program of the contest is incremented by complementary activities that enlarge the character of the anticipated functions, or that establish new overlaid programs, coincidental and contradictory in some cases.

[147] Source: http://europaconcorsi.com/results/20745-Seoul-Performing-Arts-Center.

[148] Architect: Andres Perea Ortega. New multi-functional administrative city competition project winner. Location: Yeongi, Chungcheongnam-do, South Korea. Design: 2005. This project is not going to be built.

form without any boundaries. It is already a complex and dense place of inhabitation, with just 20,000 inhabitants. The city's foundation systems intersect with each other, and there are plenty of spare spaces as buffer zones. The city, changing rapidly and diversely, is intended to become full of thousands of visual stimuli. The city is hence conceived as a chromosome aged for urban mutations, and the intersecting and accumulating foundation systems make it possible to use national and local facilities to provide for other activities.
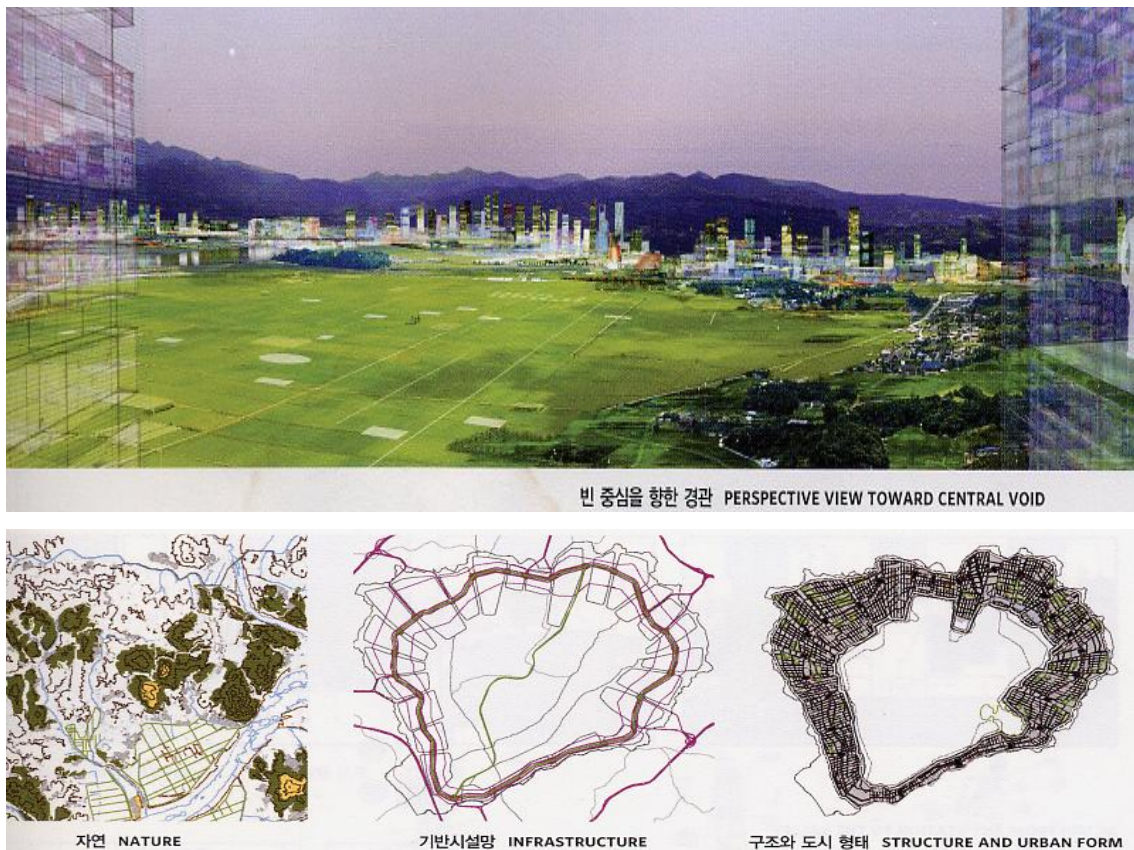
Figure 4.25: Multi-functional Administrative City. Nature, infrastructure, structure and urban form.[149]

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[149] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 90.

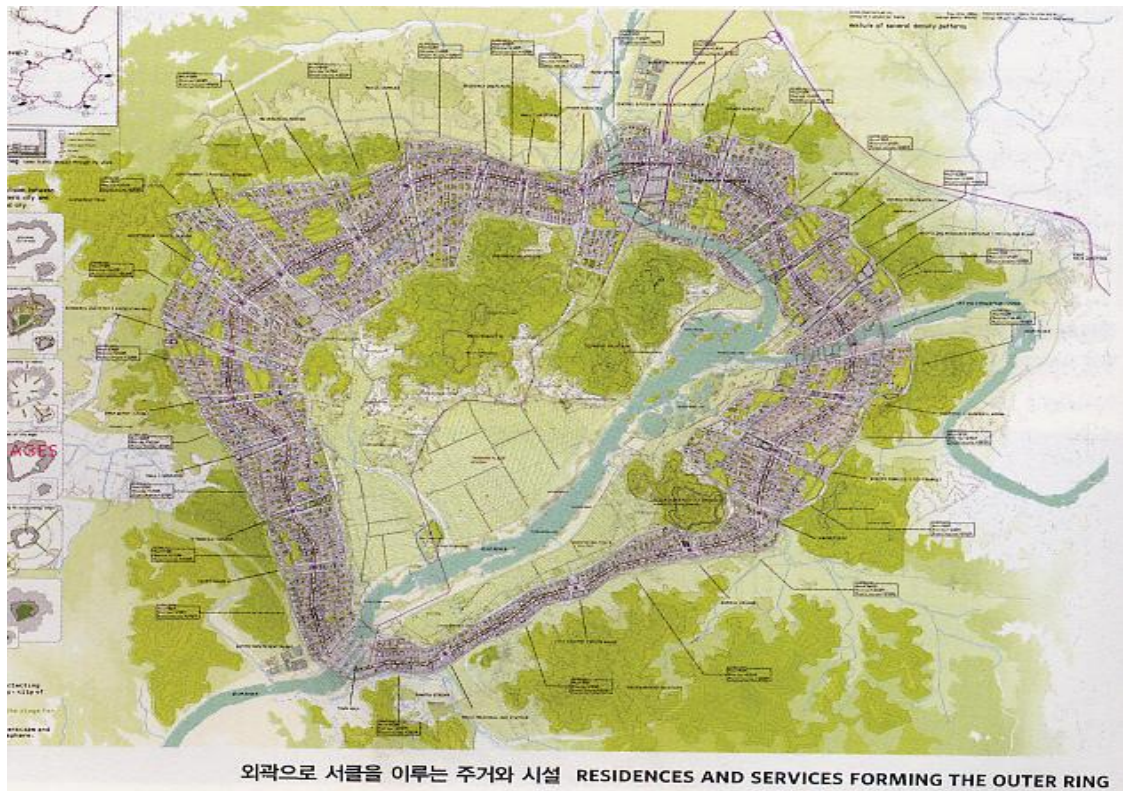외곽으로 서클을 이루는 주거와 시설 RESIDENCES AND SERVICES FORMING THE OUTER RING

Figure 4.26: Multi-functional Administrative City. Residences and services forming the outer ring.[150]

This city is the "city of democracy" and "city of people", in which the only representation is the people. Being a very different place, this is an ideal city for people to realize their dreams and desires. This city is an unspecialized and timeless cooperative development project, a city established by people's affirmative public works, and not by politicians. Therefore, the urban space is not a symbolic one, but a practical one. The concept of private property is replaced by that of common property, and especially when it comes to the management of land, the residence and the privatization of nature is distinguished. This will be a vibrant

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[150] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 91.

place where a complex and efficient environmental system for life is established, in

which rural, urban and cyber spaces intersect with each other in a harmony of

urbanism and the natural environment.[151]

Handsome Hotel (2005)[152]

물, 대지와 형태 통조 SYMPATHY AMONG WATER, SITE AND THE BUILDING FORM

Figure 4.27: Handsome hotel. The building and site form.[153]

Very different too is the so-called Handsome Hotel in Namyangju by Cho Min-

suk, another unbuilt design. This project was based on the premise that

architectural productions by people have to co-exist with the natural

environment. In order to maintain the boundaries of nature, this project used

[151] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 92.
[152] Architect: Min-suk Cho, Mass studies. Location: Namyangju, Gyeonggi – Do, South Korea. Design: 2005. This project is not going to be built.
[153] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 185.

organic shapes and materials taken from near to the site. It aimed to build on

the traditional Korean architecture theme of 'co-existence with nature', as well

as enhancing the concept of living in 'harmony with nature'.

An amenity/support facility stands between the hotel and ballroom/mansion

buildings, providing functional support to both sides while connecting them as one

entity. The property's southern section faces the freeway that serves as its

approach and has two separate driveways that each leads to the hotel and

reception hall at the southern and northern ends, respectively.[154]
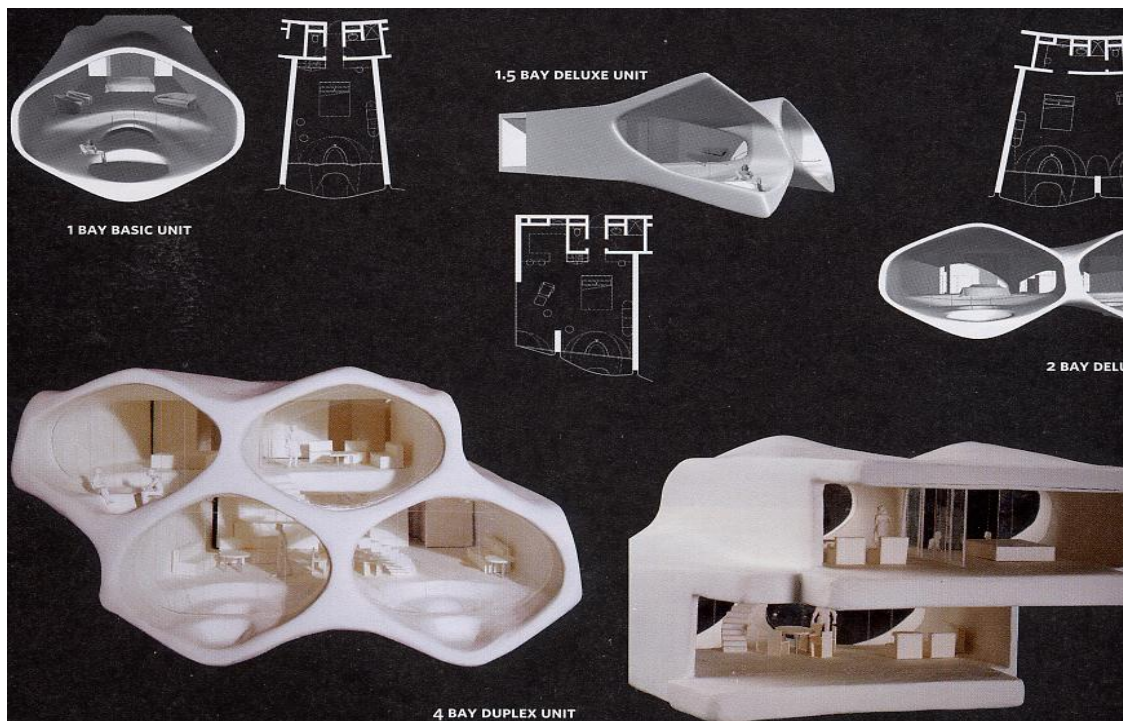
Figure 4.28: Unit systems.[155]

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[154] Sang-Ieem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 186. The five-story hotel on the southern end and the pair of two-story buildings to the north, housing the ballroom and mansion, each establish its own domain through a dedicated entrance and differing levels and be used independently.
[155] Source: Sang-Ieem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 187.
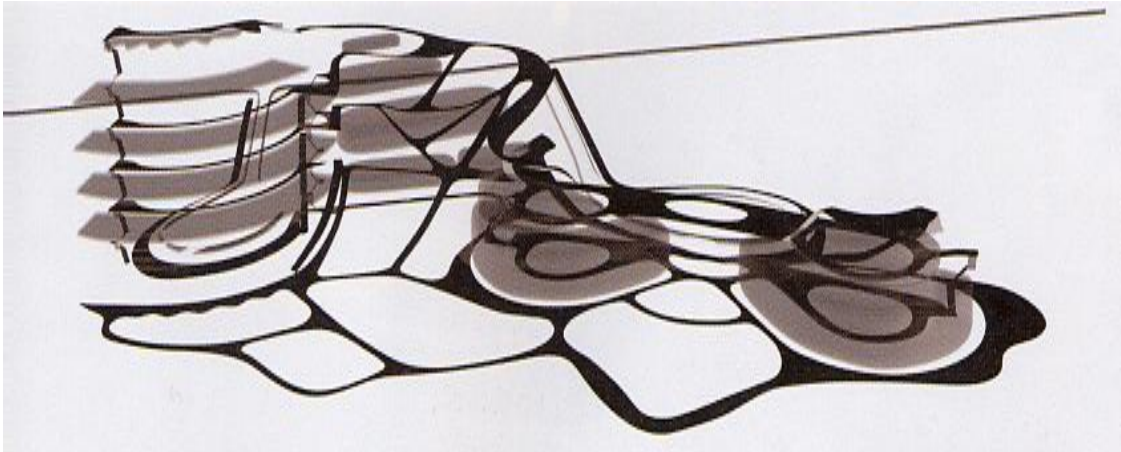
Figure 4.29: Circulation system.[156]

However, to observers it looks very much like a big 'UFO' which just landed on earth. This project paid too much attention to the boundary between nature and building and as a result neglected the boundary with reality.

4.4.4 Projects Highlighting an Environmentally-friendly Approach

Ewha Campus Centre (2004 – 2008)[157]

For the Ewha Campus Centre in Seoul by Dominique Perrault, the complexity of the immediate site through its relationship to the greater campus and the city of Shinchon to the south required a 'larger than site' response — i.e. a landscaped solution which weaves, together the EWHA campus and the city.

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[156] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 188.
[157] Architects: Dominique Perrault Architecture, Location: Seoul, South Korea. Built Area: 70,000 sqm. Completion: 2008.

Figure 4.30: Ewha Campus Centre design (2004).[158]

Figure 4.31: Ewha Campus Centre completion (2008).[159]

A new "Champs Elysees" invites the public into the site carrying students and

visitors alike through the campus center northwards, bring together the different

[158] Source: Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 130.
[159] Source: http://www.archdaily.com/227874/ewha-womans-university-dominique-perrault-architecture/.

levels of the site. The Pastoral nature of the campus is perhaps its most

remarkable quality. It should be permitted to grow outwards, or inwards in this case,

covering the campus center with trees, flowers, and grass. The park is re-drawn.

An Idyllic garden is the result, creating a special place for gathering, conducting

informal classes, and simply relaxing. The notion of weaving together the campus

is again evident, blurring the distinction between old and new, building and

landscape, present and past.[160]

Figure 4.34: Ewha Campus Valley.[161]

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[160] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 129. The paths connecting the existing buildings are maintained, with new "bridges" crossing the valley creating new east west connections that were previously limited by the EWHA stadium. Underground connections are also suggested. A three-dimensional system of connections is therefore possible, truly interesting the campus centre with the campus.
[161] Source: http://www.archdaily.com/227874/ewha-womans-university-dominique-perrault-architecture/.
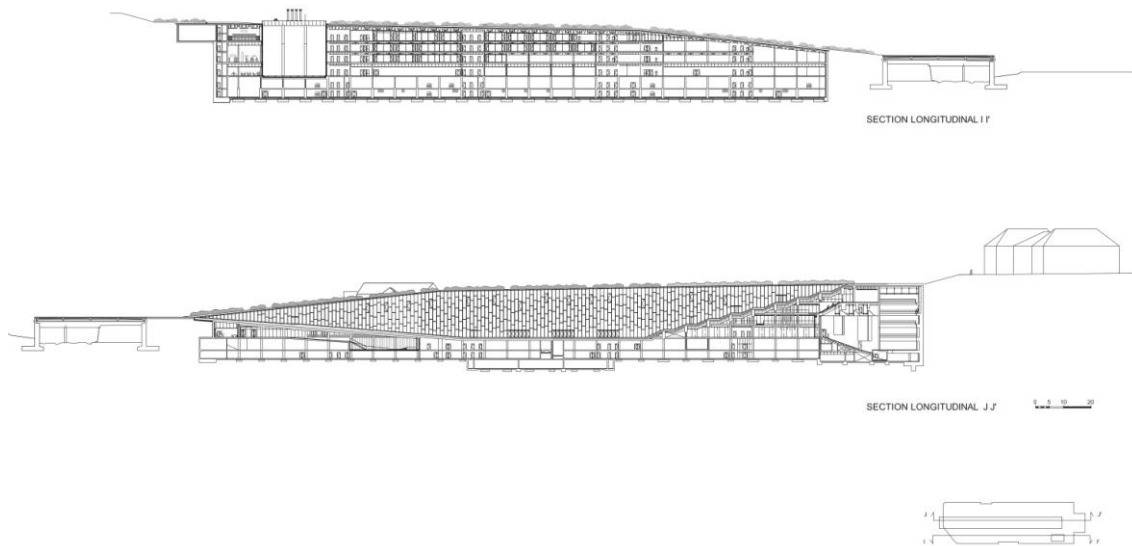
SECTION LONGITUDINAL I I'

SECTION LONGITUDINAL J J'

Figure 4.32: Ewha Campus Centre section.[162]
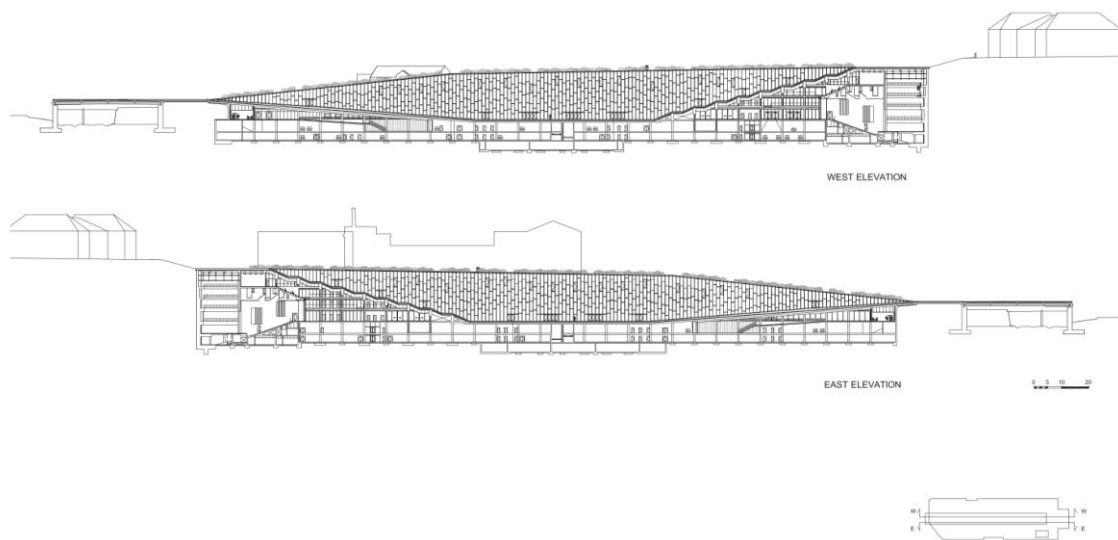

WEST ELEVATION

EAST ELEVATION

Figure 4.33: Ewha Campus Centre East elevation.[163]

The main design gesture, called the "Campus Valley", in combination with the

"Sports Strip" to create a new topography that impacts upon the surrounding

landscape in a number of specific ways. The so-called 'Sports Strip' is also intended to act as many things at once. However, this project as built has destroyed the cultural aspect of EWHA campus. There was once a special romantic place in front of the main gate. The main gate was small and narrow, but in front of the gate there was the event place. Many men (including me!) would wait for students from the corresponding EWHA Woman's University with flowers, and historical and cultural events were often held alongside the train line. This project by Perrault disastrously ignored the historical and cultural aspects, killing the essence of this location.

The Seonyudo Park Landscape Project (1999-2002)[164]

The Seonyudo Park Landscape Project in Seoul is aspirational example of an environmentally responsive design. Seonyudo was once an islet full of water, since it used to accommodate a water purification plant that drew water directly from the Han River. However, in the late-1970s when a new water purification plant was constructed on this island, a period of rapid industrialization resulted in an extremely negative impact on the environment, including a deterioration of the water quality in the Han River.

> The design concept focused on expressing stories of Seonyudo's history and the
>
> water purification plant, by utilizing the peculiar shapes of space and land shaped
>
> by organically composed facilities, for the environment, nature and the future. The
>
> newly-transformed facilities of the former water purification plant are now viewed as

---

[164] Architects: Seo Ahn Total Landscape and Sung-young Joh architects. Location: Seoul, South Korea. Design: 1999. Completion: 2002.

structures with and formative beauty of spaces and solidity. As if it cut-away trees

in an over-grown forest, only the structures and buildings with potential for

recycling are sorted out to create more space.[165]

Figure 4.35: Seonyudo Park Landscape project.[166]

Moreover, other Han River development projects destroyed the ecosystem of

the riverside, reducing it to a polluted waterway. Nowadays, as the plant has

ceased to perform its original function, the Han River is gradually regaining its

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[165] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 85. The selected remaining facilities, together with the underground space once key to the water purification plant, create a dramatic space where visitors experience the solid unevenness of the ground, simultaneously giving the whole space rhythmical sense of strength and weakness. In the empty space where some facilities have been removed, cottonwood trees are planted in smart order, and trees line the straight circulations. Also, the white birches planted together in tidy belt-shape function to resonate throughout the whole space the shape of intense straight lines of water purification structures.
[166] Source: Jin-hee Park and John Hong, *Convergent Flux: Contemporary architecture and urbanism in Korea* (Basel: Birkhauser, 2012) p 151.

green scenery of the past, and therefore the reborn Seonyudo Park aims to

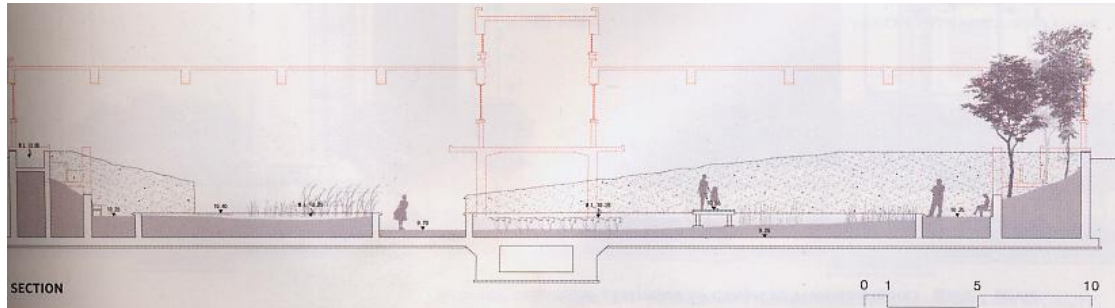resolve the environmental and ecological problems of the river.

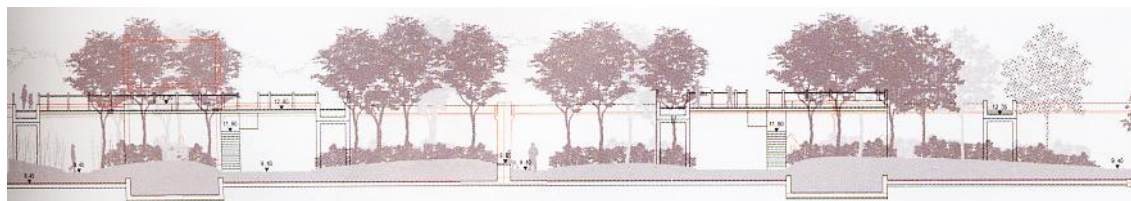Figure 4.36: Section framework of existing structure and natural landscape.[167]

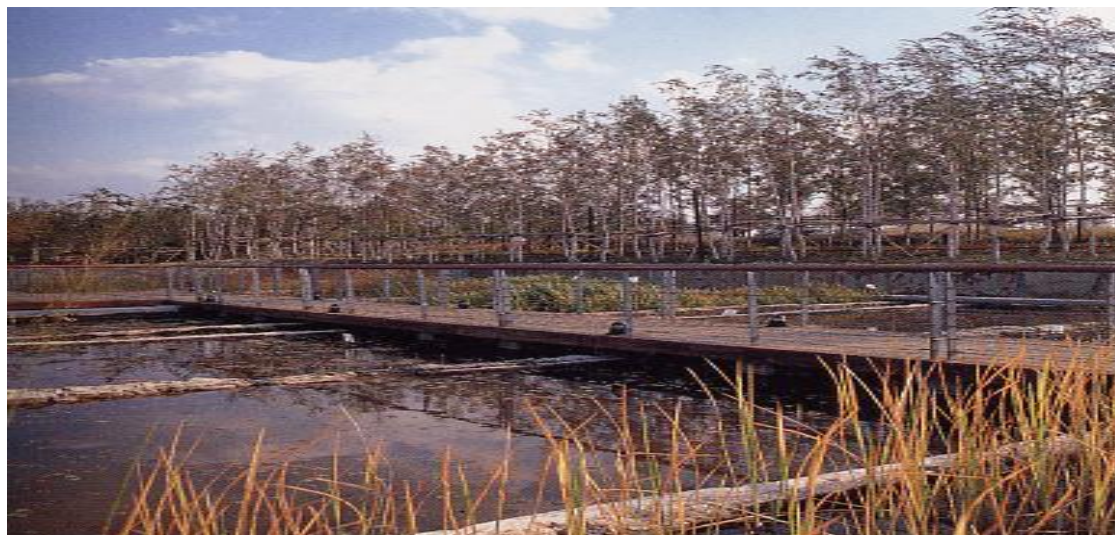Figure 4.37: Interconnected natural landscape and artificiality.[168]

Figure 4.38: Purifying function of reservoir.[169]

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[167] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 86.
[168] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 87.

Figure 4.39: Traditional Korean *Madang* painting.[170]

It might appear only natural that South Korean architects would empathize with

these new types of large urbanistic projects, since the organizing of external

space has long been the essence of Korean traditional architecture. However,

such a tradition can be said to have completely disappeared in South Korea

ever since modernist architecture was introduced to the country. After the 1950s,

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[169] Jin-hee Park and John Hong, Convergent Flux: Contemporary architecture and urbanism in
Korea (Basel: Birkhauser, 2012) p 150.
[170] Source: http://www.aks.ac.kr/home/totalSearch.do.

architectural intention was focussed more and more inside the building, and thus the reason for having complex external spaces vanished. In this light, 'landscape urbanism' when introduced around 2000 appeared to suit the ideas of Korean architects well, and in taking it up, they then attempted to restore older urban forms such as traditional *madang* (courtyards) and alleyways as part of the new design approach. Since a fundamental principle of 'landscape urbanism' is that of considering internal and external spaces as a continuous whole, then South Korean architects are now able to reassert the possibility that the specific tradition of Korean architecture might develop in a more universal, globalised manner through the adoption of the 'landscape urbanism' approach. Such a proposition has certainly played a pivotal role in fact of 'landscape urbanism' growing into the dominant tendency within Korean architecture since 2000.

Having thus looked at the introduction of American-style 'landscape urbanism' in South Korea, we can read the architectural production of a Korean tendency which can be labelled as 'landscape urbanism'. It is an approach which reverberates well with the cultural and urban sensibilities of the Korean people, and one that seeks to reconcile the demands of high-density cities with a more horizontally based pattern of parks, opens spaces and increased connection with nature. Here it is worth noting that 'landscape urbanism' itself comes out of a longstanding western tradition, as typified by the English Picturesque, in which the aim is to appear natural while in fact being all about creating a concealed form of control over nature. Korean people clearly do not feel any

sense of rejection toward the concept of 'landscape urbanism', but it is also noticeable that there is considerable misinterpretation and misuse of the resulting urban forms, meaning that people in South Korea have been modifying the concept of 'landscape urbanism' in one way or another – and by doing so, they are creating a new kind of vision about future urban projects. Through the investigations in this chapter, it becomes clear that internal cultural forces are a very strong influence on South Korean architects and urban planners. Traditional perspectives on the role of landscape as a key aspect of cultural identity is an essential transformation within Korean 'landscape urbanism'.

With this in mind, it will now be helpful in the next chapter to look in more detail at case studies provided by recent Korean architectural projects. In particular a series of urban projects will be examined to find the links between innovation and urban spatiality within the context of South Korean urbanization, notably around Seoul, where a transformation that involves culturally-based and arts-based approaches – the so-called 'innovation environments' – along with new forms of regional regeneration in 'knowledge-based' clusters have been experiencing a rapid rise over the last decade.

Chapter 5: Theme Cities

Having looked in the previous chapter at why the idea of 'landscape urbanism'
became such a dominant movement in South Korea since 2000, this chapter
will look at the new examples of 'theme cities' designed and built since then.
After 'landscape urbanism' had been transferred to the different cultural context
of Korea, its major concepts came in turn to be transformed, thereby generating
new patterns and methods to connect the constituent elements of the built
environment. This chapter will consist of a detailed investigation of case studies
presented by recent Korean architectural and urban projects, ranging from
small-scale building projects through to large scale urban projects, and involving
issues of local identities, personal values and cultural transfer. In particular, the
case studies of urban projects will be used to examine the links between
innovation and urban spatiality in the context of South Korean urbanization,
particularly in areas around Seoul, where a transformation that has involved
culturally-based and arts-based approaches – the so-called 'innovation
environments' – along with new forms of regional regeneration in 'knowledge-
based' clusters have experienced such a rapid rise over the last decade.

These new 'theme cities' are a relatively recent urban experiment in South
Korea, reflecting a major shift in the political and economic climate. 'Theme
cities' are careful to distinguish themselves from other industry-based cities,
such as the product research-and-development cities in the previous era of

Korean modernisation. The chosen case studies, all of them important

instances of South Korean 'landscape urbanism' projects, have been

specifically selected for the way that they have tried to involve the participants

who will work or live in them, and for the way they touch on issues related to

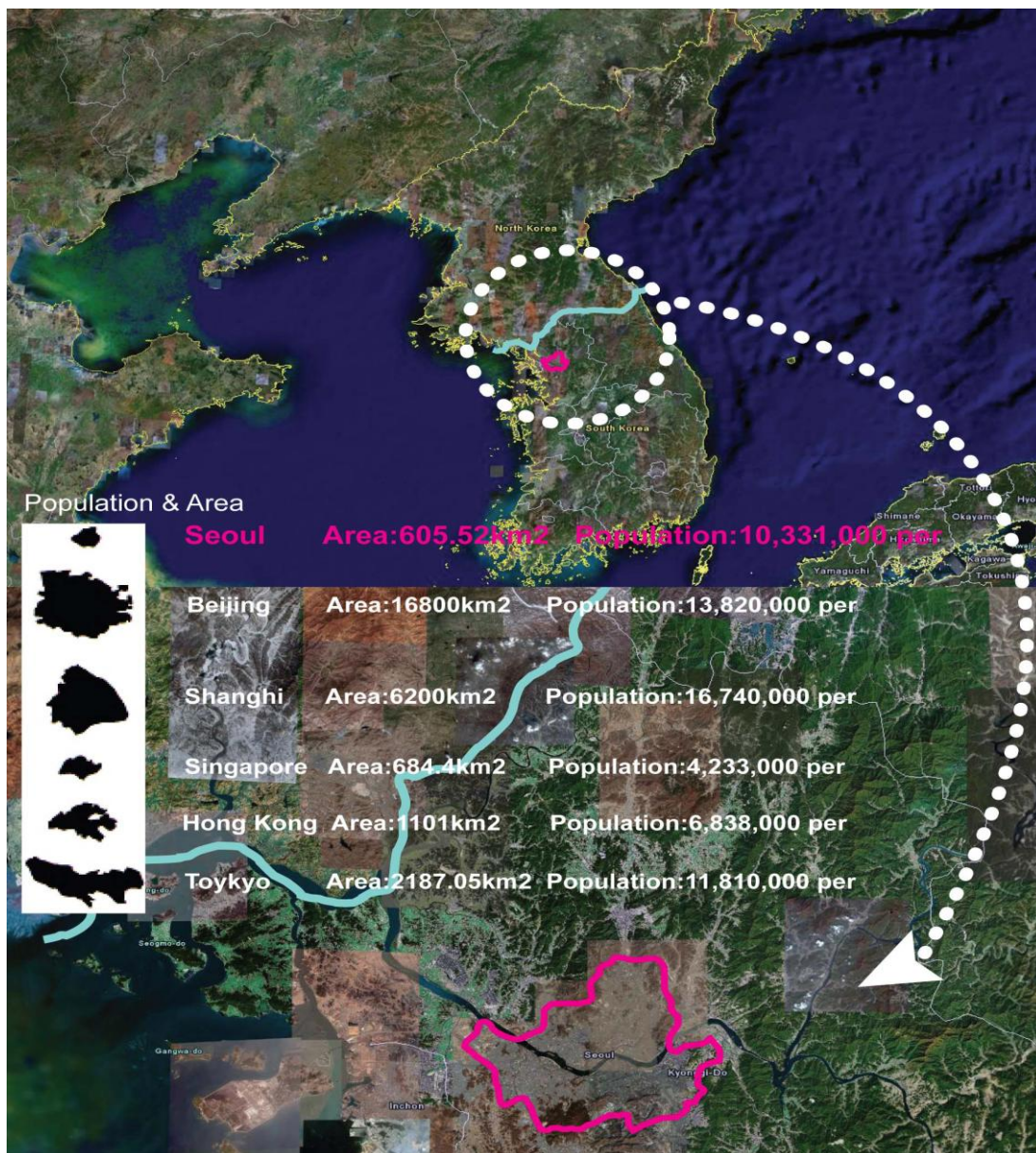rapid urbanization based on the new information society.

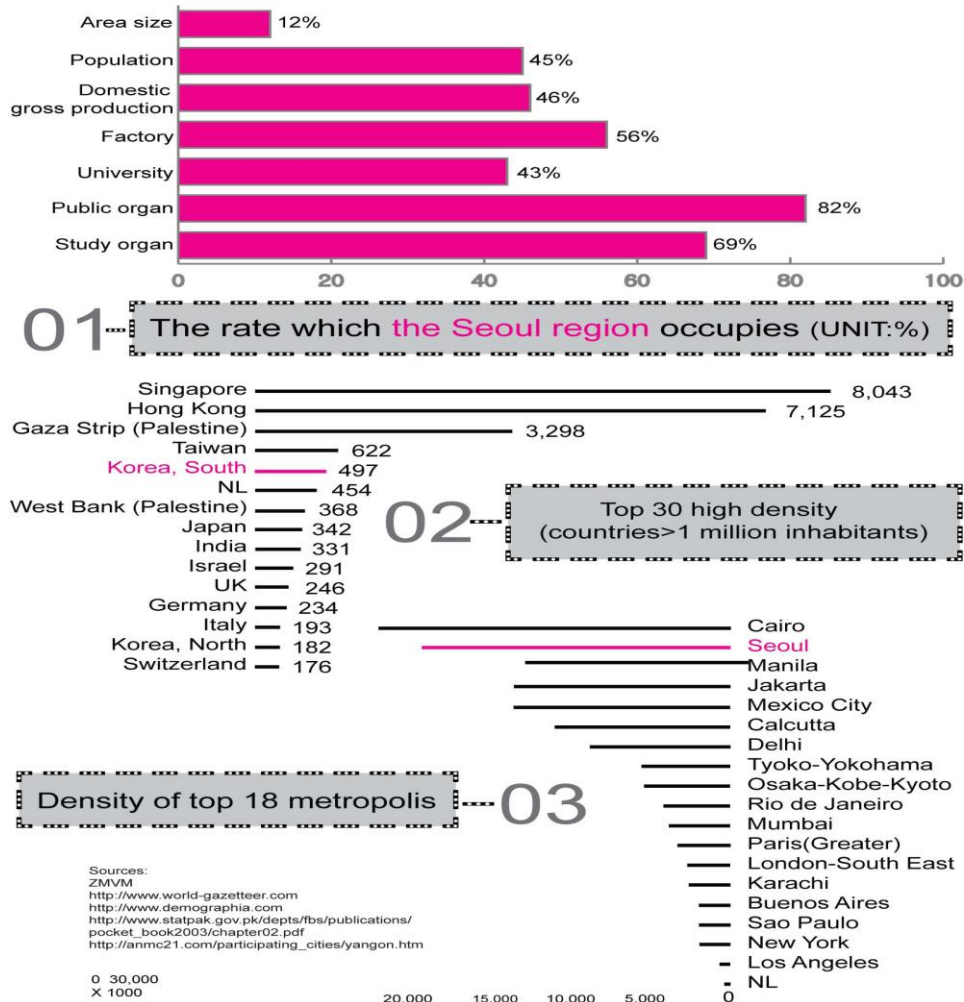Figure 5.1: Population and area of Seoul in South Korea.

Figure 5.2: High density Seoul.[171]

Key questions to be asked in this part of the study include:

- How do the proposals which are being designed as 'themed cities' in South Korea – based on what is of course originally a western typology – differ from the typical theme-park in America or Europe? And how do such cities gain as much attention as any other part of South Korea's urban infrastructure?

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[171] Source: http://www.world-gazetter.com, http://www.demographia.com.

- How do these new ways of investigating architectural ecology suggest new ideas for revitalising the notion of urban community?

- Can these examples of city-branding strategies succeed in generating and maintaining the economic competitiveness of their regions?
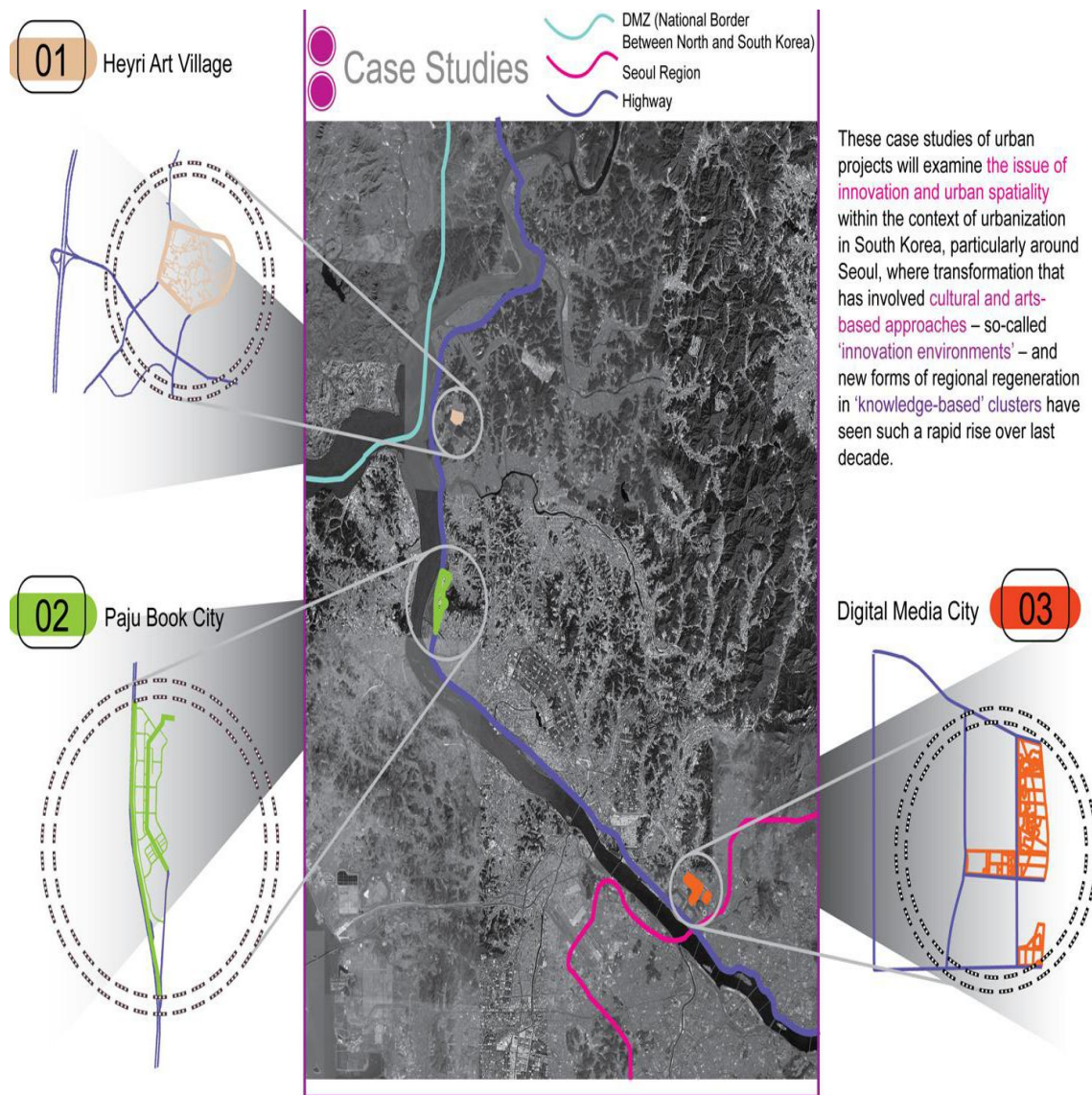
5.1 Theme Cities

Figure 5.3: Case studies mapping.

Theme cities are a recent urban experiment in South Korea, reflecting a major shift in the political climate in the last decade. The new theme cities are based on painfully and gradually gained democratic freedom and the democratized government's will to decentralize its power. They also coincided with economic inertia. From their inception less than 10 years ago, two utopian-tinged urban/semi-urban developments located 40kilometres north of Seoul and a 10 minute drive from the border between South and North Korea, Paju Book city and Heyri Art Village, with their community-based, ecologically conscious, and controlled development, clearly positioned themselves as an alternative to Seoul, where chaotic/dynamic urban qualities are generated accidentally by an uncontrollable market economy system.[172]

An idealistic, almost utopian premise co-exists with an ambition to make the new 'theme cities' both global in scope and economically viable at the same time. In other words, they are all-too-willing to taking part in the global 'experience economy'[173] which analysts have written about in regard to Digital Media City (DMC), for instance this, on the outskirts of Seoul, was established to build an information technology-oriented town that could host both Korean and foreign digital media businesses in the software industry and related IT fields, as well as those in the media and entertainment industry (encompassing computer games, broadcasting, movies, animation, music and digital education).

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[172] Min-suk Cho, *Theme City* (Seoul: Space, 2004) pp 55-60.
[173] James H Gilmore, Experience Economy: Work is Theatre and Every Business a Stage (Boston: Harvard, 1999).
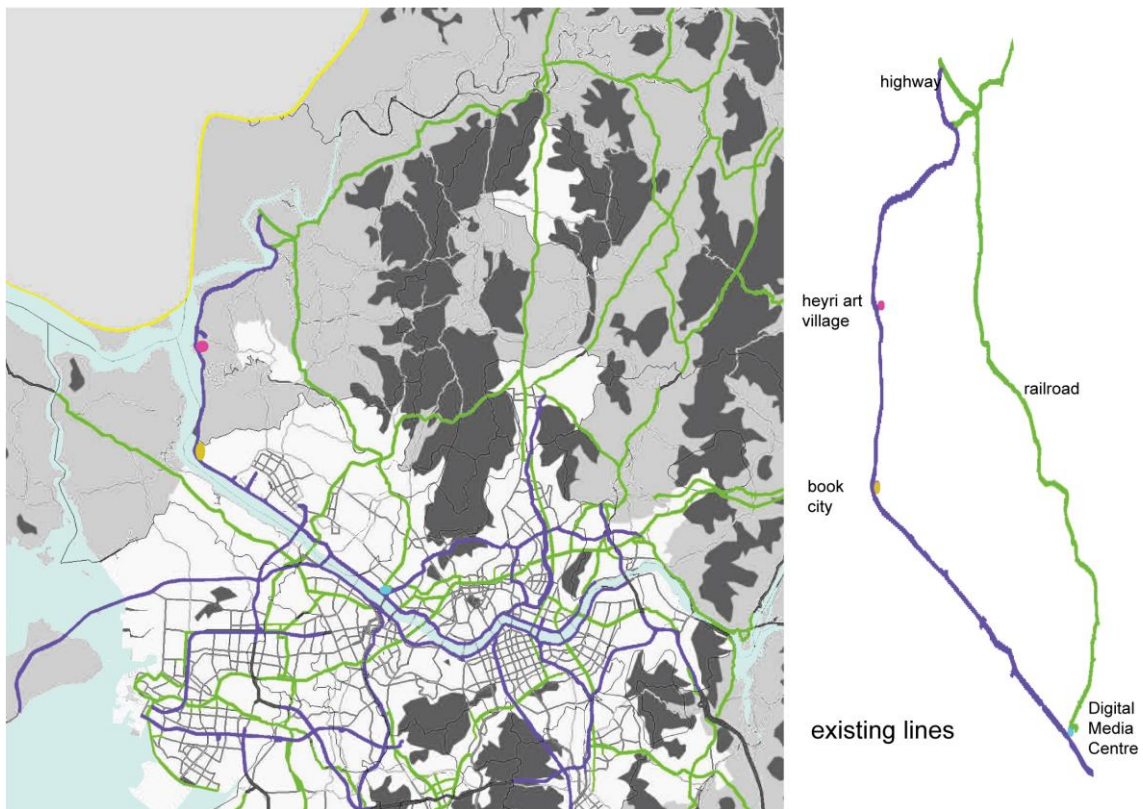
Figure 5.4: Existing infrastructure lines.

Other new 'theme cities' have been developed as initiatives of relatively small printing companies, such as the Paju publishing company which has created Paju Book City, or else groups of people with shared interests, such as at the Heyri Art Village with artists and other people engaged in cultural production – rather than been conceived by major industrialists or large construction firms. As their various names imply, these 'theme cities' are devoted – at least initially – to highly specific cultural industries and interest groups. Heyri Art Village, for instance, primarily includes artists' studios, gallery spaces, movie studios and other cultural facilities, whereas Paju Book City, designated as an industrial zone, caters to the publishing industry with its several publishing houses,

distribution centre, convention hall and supporting facilities.

Figure 5.5: Expecting activities.

These three case studies have thus been specifically selected for the way that they have tried to involve the participants who will work or live in them, and for the way they touch upon issues which are related to rapid urbanization based on the new information society. The design and construction of the selected 'themed cities' – Digital Media City, Paju Book City, Heyri Art Village – have all tried to reorganize architecture and their urban infrastructure within a local ecosystem, although each has a distinctive approach, depending on the nature of the respective projects. All of these three the projects claim to be trying to introduce ecological sustainability and a better self-adjustment to nature within

the city. It will be also investigated in this study whether this economic, social and cultural reality has played a pivotal role 'landscape urbanism' becoming such a dominant tendency within South Korean architecture.

5.2 Heyri Art Village (1997 – Present)[174]

The major role of Heyri Art Village is to provide a pleasant residential area for artists and professionals who are engaged in creative activities of all genres, and where they will be able to concentrate on their work in a nature-friendly space. It is Heyri's goal for worldwide art lovers also to flock into the valley, and for Korean artists thus to meet the global counterparts competitively.
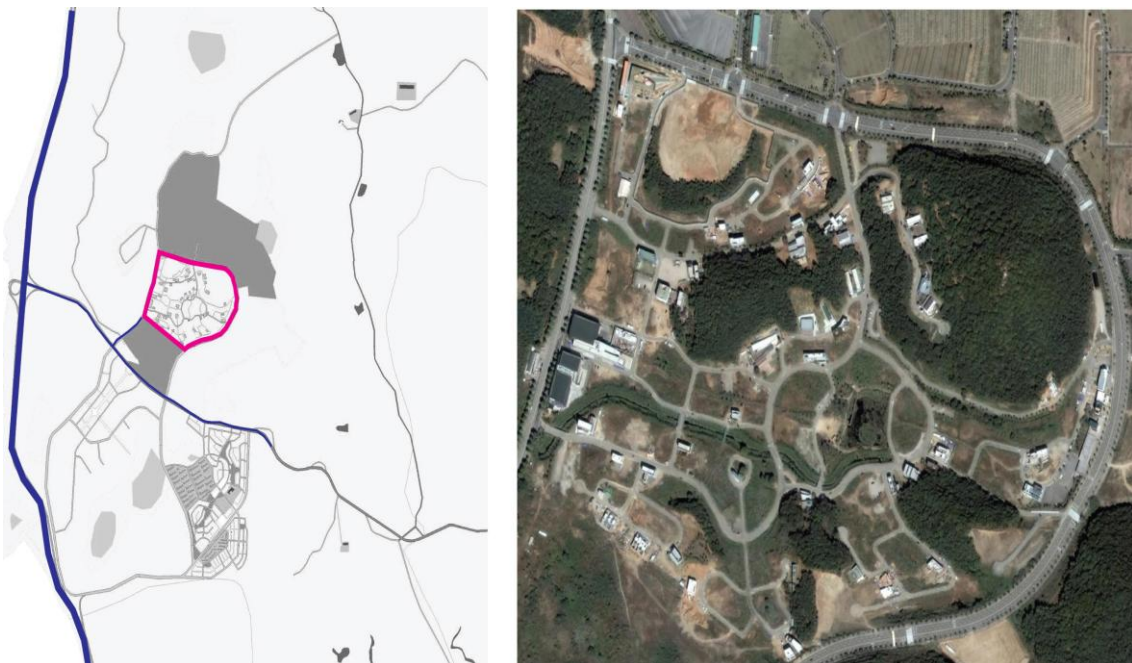

Figure 5.6: Heyri site mapping.

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[174] At first, Heyri Art Village was designed as 'a book village' linked also to Paju Book City in 1990s. But in the processing of the project, lots of artists in various cultural fields joined in with the endeavour. The concept of the village was then expanded into a separate 'cultural art village'.
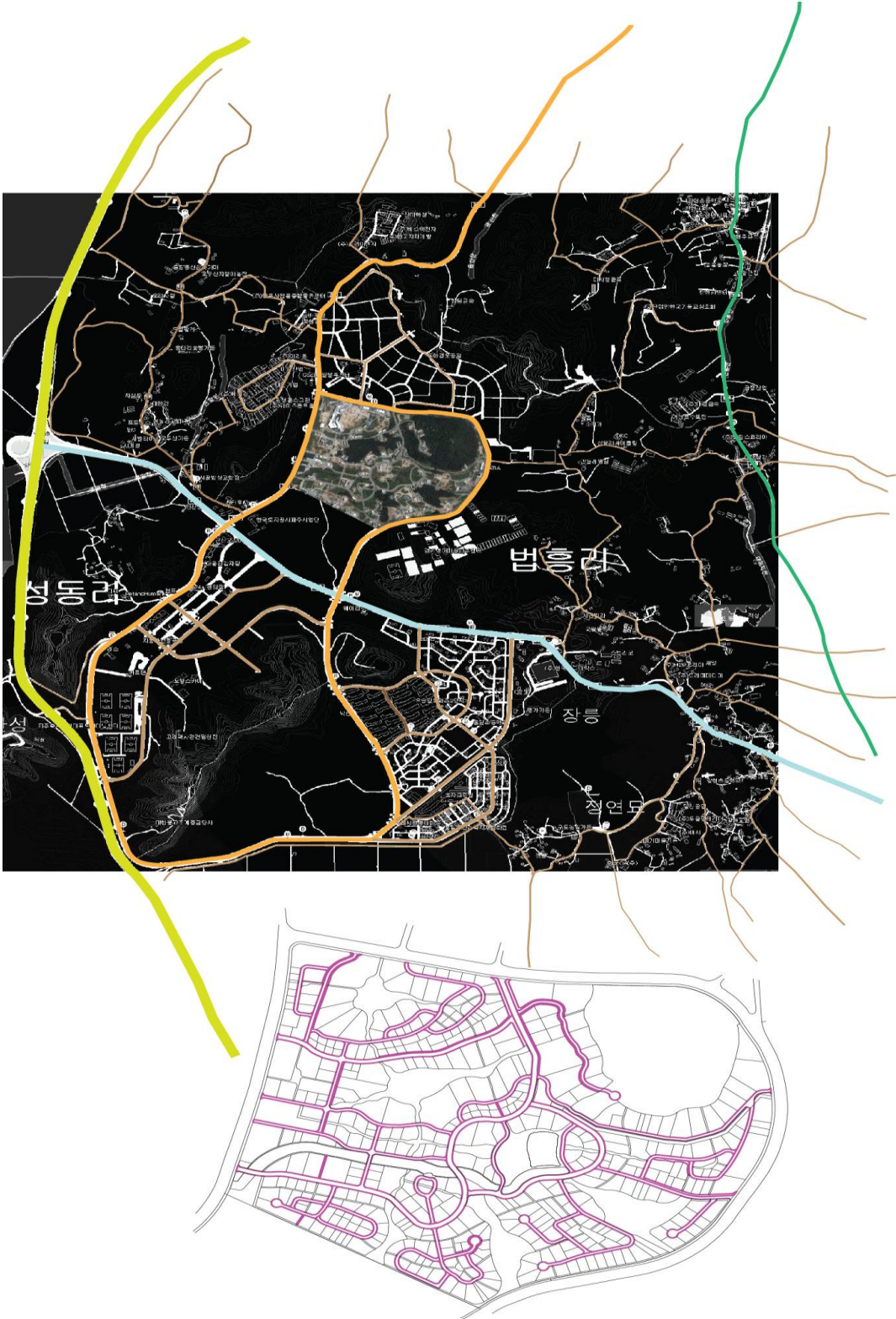
Figure 5.7: Heyri mapping network.

The acted layout and design of the Heyri Art Village is aimed to preserve and maximize the natural surroundings by conserving the mountains, mounds, swamps, and rivulets that already exist there. This ecological motive will persistently be applied to all areas of development, including its architecture, energy system, scenery, road and pavement infrastructure.

The members share two main purposes to realize their common ideal. First, as a community of artists, the members aim to generate, exhibit and disperse culture and concurrently, to reside together in a 24-hour community to generate cultural understanding in a natural setting. Second, the members aim to create and manage a new 21st-century urban formalism and approach by engaging a design committee, construction coordinators and pool of preauthorized, selected architects. Thus, an organization consisting of qualified members, that owns the space and a pool of specialists, including architects, city planners, landscape architects, and civil engineers, who build upon that space, work mutually in coordination.

> Heyri's distinctive character is based on the concept of flow of land and
> communication with natural environment. Accordingly, architecture of Heyri
> excludes grid-oriented framework and aims to minimalize transformation of the
> existing land structure in converting the land to municipal framework. This new
> form maintains existing topography and concurrently pulls nature itself into the
> centre of municipality, diverging from the traditional forms of urban-centre oriented
> planning or division of land based on functionality according to zoning. Actually,

rather than a new form of municipal framework, architects start with recognition that

values the relationship between artificiality and nature, as opposed to European

phenomenon where traditional hierarchical division of land according to shape no

longer applies.[175]

Heyri Art Village, formed fairly adjacent to Paju Book City, is considered to be a

further step forward and is moving toward the perspectives of cultural difference

and creative practice. This is attributable to the fact that many architects

participated right from the stage of producing the master plan, thereby

establishing good conditions for realizing concepts of 'landscape urbanism' in

the project. Escaping from the usual strict grid road patterns of South Korean

cities, an indeterminate network was formed in which buildings were arranged

so they were integrated with the natural environment. Participants in Heyri Art

Village include diverse groups of professionals in art, theatre, music, dance,

photography, publishing, architecture, traditional culture, film, sculpture, graphic

arts, art collection and exhibition. The general concept of Heyri Art Village is to

establish a place where are able to interact all the various activities of artisans

and cultural practitioners who collectively yearn for Korea's re-unification.

Heyri Art Village's distinctive character derives from the fact that the artists and

cultured intellectuals it houses have consciously formed a community to

construct the village without any involvement of the South Korean government

or even the local governing board. The formation of Heyri Art Village was a long

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[175] Sang-Ieem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 32.

process that went through an unusual structural formation and organizational methodology. Since 1997, Heyri has had subscribing members who needed to possess a specific qualification threshold as established by its qualification committee. There qualified members include primary creators (architects, painter, sculptors, calligrapher, filmmakers, photographers, musicians, writer, critics, publishers, art school educators, etc) and also secondary culture and art managers (facilitators of art galleries and museums, concert halls, theatres, book stores and art shops, movie producers, etc). Now there are over 370 members of the community building their own artistic spaces in the form of domestic houses, work spaces, museums, galleries, and the like.

Figure 5.8: Heyri art works and environment.

1) Receiving the new eco-friendly paradigm today.2) Presenting the alternative plan which is on the page of the city-complex history in the world and Korea.3) Designing city complex which is creative and has the economical worth.4) Rearranging the present art valley land after estimating the overall problems and

merit of Tongildongsan.5) The utilization project of the land which is maximizing the

merits for accessing to Seoul and other convenient things easily. 6) The

Development which preserves the configuration of the ground and geographical

features in the surrounding nature.[176]

5.2.1 Culture Production and Process

All the Heyri members, based on their specific genres, belong to sub-

committees such as the architectural committee, planning committee, art

committee, membership committee, Heyri Award committee, resident town

committee or board of directors. The chairman of the board of directors and the

administration committee also form a part of Heyri village, and all issues

discussed by sub-committees are submitted to the board of directors for

decisions. The members belong to subcommittees based on their specialty and

work on each discipline's sub-committee at regulating intervals.

Heyri's structure thus emulates that of a corporation, subdivided into board of

directors, sub-committees, administration, and resident town committee, of

which the construction committee oversees all aspects of management. The

members are required to devote 60% of their constructed space to cultural

infrastructure (such as exhibition, performance, work or educational space, etc)

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[176] *Ibid.*, p 112. 7) The preparations for the four seasons in a year. 8) The suitable division,
selection, and arrangement of location according to the aim sand uses of the buildings to induce
the synergy effect. 9) The plan which overcomes the limit and defect of existing city and which is
suitable for the human scale.10) Endowing the code of culture complex to the landscape
architectures, construction buildings, environmental designs.

in order to promote the common ideal of the art village.

Figure 5.9: Heyri nature environment and artworks with visitors.

Heyri Art Village realizes its ideal of promoting the production of culture through four methods. First, each building has to be able to incorporate exhibitions and performing and educational programs. Second, these individual buildings, in liaison with the 6 central galleries, are required to plan cultural festival and arts-oriented exhibitions. Third, the whole village has already held two annual cultural festivals, ranging from thematic exhibitions, architectural exhibitions and a symposium on the design of Heyri itself, as well as various performances. Fourth, a wide range of design and art shops, cafes and restaurants have been set up, and they also conduct smaller scale concerts, performances, and workshops. Within such premise, the members examine ways to communicate Heyri's characteristic value and to realize cultural dispersion. For examples, the members evaluated holding exhibits emphasizing Korea's IT prowess such as new media art exhibits or developing artistic exhibits based on logistic

uniqueness of Heyri near DMZ. Already, many acclaimed film directors (Park Chan-wook, Kim Gi-duck, Kang Jae-kyu and Kang Woo-suk) are members therefore, producing cultural film or holding exhibits of film related art are also being examined. However, fusing the culture with business in the village is not being successfully practiced due to the ambiguous characteristic regulations.

5.2.2 Ecological Motive

Figure 5.10: Landscape method.[177]

The physical nature of Heyri Art Village has been formed around the contour of

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[177] All open space in Heyri Art Village is divided into artificial and green areas. The green areas' landscape must assimilate to the existing terrain, preferably with wild plants kept; each building also must assimilate with existing environment and neighboring lots, except for the artificial area for building construction. Image source: http://www.heyri.net/blog/.

mountain as if it emulates contour of human hand, flat country between the mountains, river and swamp so the nature could be preserved in maximum effort. The reed swamp is being centrally located and the public square has not been paved so as to preserve the natural soil. Also the pedestrian walkways have been designed to be either opened or paved with wooden deck hence the wild plants could grow naturally and the road has been treated with cement blocks to withhold the rainwater.
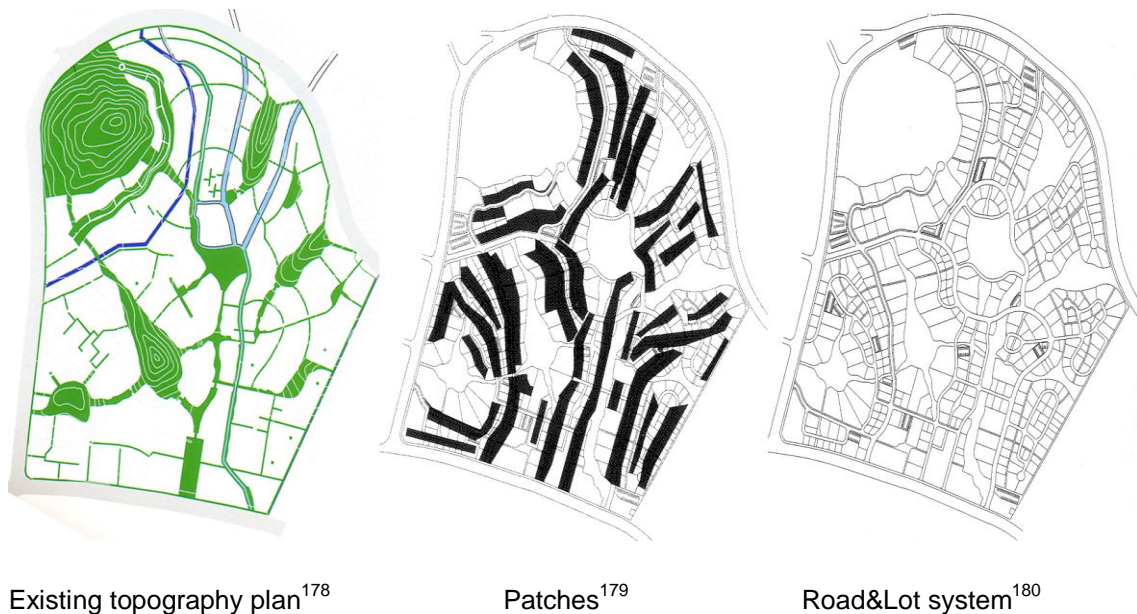

Existing topography plan[178]   Patches[179]   Road&Lot system[180]

Figure 5.11: Existing topography plan, patches, road & lot system.

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[178] Existing topography was left untouched to the maximum in all phases of planning process, including the water routes and farming supply lines. Also the wetland located in the middle of the site was preserved to be cultivated as an environment for the natural ecosystem. Image source: http://www.heyri.net/blog/.

[179] 'Patches' with certain unity divides artificiality and nature, but furthermore, – because structures are built upon them – same 'patches' form other shapes that become the first level of architectural framework. This produces a unique urban order that cannot be found in typical Korean grid-oriented urban landscape. Image source: http://www.heyri.net/blog/.

[180] Lots were divided in respect to the natural topography of each block, with typical areas of 231m², 462m², 693m² and 1,155m², unless some adjustments were needed for certain conditions. Lot numbers were assigned from A-H upon the division of properties, while the width: length ratio of the property is always around 1:1.5. The wider and more major the road is, the larger area of the land that is assigned. Image source: http://www.heyri.net/blog/.

Apart from the actual artificial building sites the landscape possesses an unstopped flow of natural elements, resulting from understanding fundamental structure of nature and recognizing architectural phenomenon derived from such an understanding, re-accommodating the differences between architecture and artificiality at a new level.

Figure 5.12: Artificial and green area.

A green network is thus intended to connect the whole valley of Heyri Art Village like a nerve system. As such, it is an epochal event in the history of planning of such urban complexes in South Korea. The green network will also be utilized as pedestrian routes, resting areas and small parks. Green 'patches' will undoubtedly provide the inhabitants with a far more pleasant place to relax in. these 'patches' hence play a vital role as public space for the community and their relational arrangement becomes the key issue for the design – which

means that architecture and landscape need to be based on mutual communication. A greater flow of communication means also breakdown of elements of division in Heyri Art Village. Patches with certain unity divides artificiality and nature but also, because structures are built upon them, complex of patches form another shapes that become the first level of architectural framework. This produces a unique urban order that cannot be found in the usual kinds of grid-oriented urban landscapes.

Land use plan[181]   Vehicle circulation plan[182]
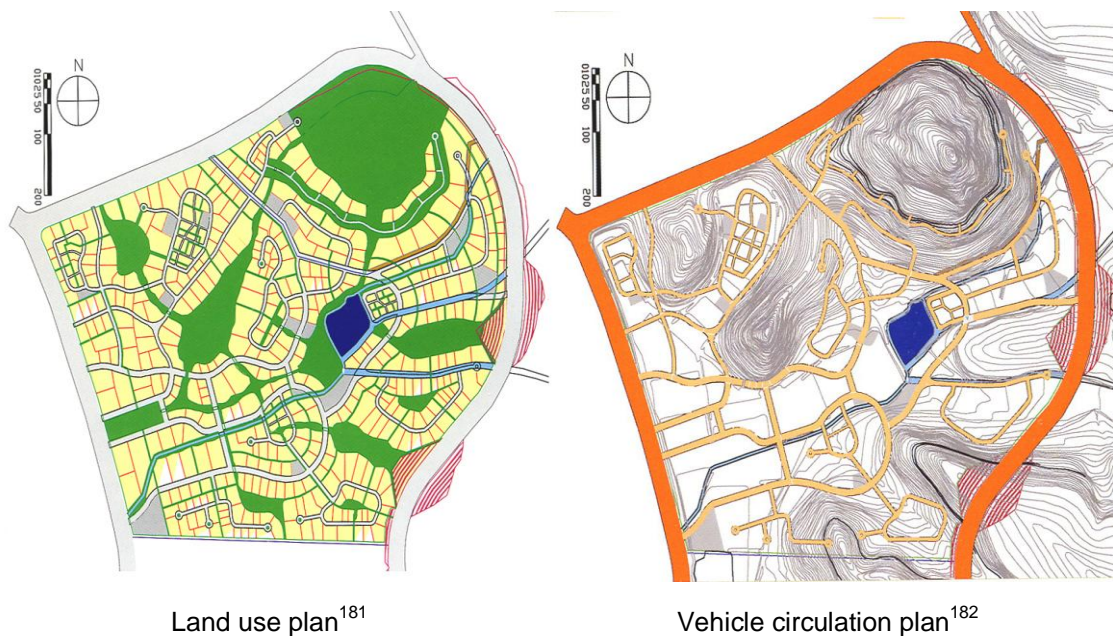
Figure 5.13: Land use plan and vehicle circulation plan.

All open space in Heyri is divided into artificial and green area. The green area's landscape must assimilate to existing mountain and ridgeline, preferable with

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[181] Land adjacent to the main road was assigned as parks and green spaces that carry high land – use efficiency. Around there green spaces, 8 blocks are laid out to develop the village concept. Image source: http://www.heyri.net/blog/.

[182] Outside of the site, a 3m-wide buffer zone is provided to reduce the noise of traffic and enable proper visibility of the landscape. Main roads are 10-12m wide with cars being allowed to park alongside the pavements. Image source: http://www.heyri.net/blog/.

wild plants and even an individual lot must assimilate with existing environment

and neighbouring lots, except for the artificial area for building construction. This

ensures that architectural landscape exists within natural environment rather

than being constructed artificially.

The most renowned architects in South Korea are partaking in the foundation

and designing of Heyri Art Village. These architectural coordinators and master-

planners[183] are also setting up architectural guidelines[184] intended to

harmonize all the buildings, believing their goal is somehow to realize the

creative spirit of era. Each of the buildings will play the role of an architecture

museum in itself, given that they will bear the names of the architects who

designed them. All entities in Heyri Art Village are thus meant to be artworks

that are completely in accordance with the natural surroundings. The aesthetic

effect will be considered in all places from larger public squares through to a

single pavement block. When fences are needed, they are to be placed

artistically. There are five bridges in Heyri Art Village. Although rather small and

short in length, these bridges were creatively constructed in the sense that their

design and construction were implemented through public competitions.

Five bridges were seen a sensation in the civil engineering and architecture world

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[183] The Research Centre of City Complexes, Yonsei University, Architectural coordinators: Kim Jun-sung, Kim Jong-kyu. Design committee: Woo Kyung-kook, Lee Jong-kyu, Lee Jong-ho and Park Gelen. Urban planner : Kim Hong-kyu. Architectural committee: Lee Myong-whan, Woo Kyung-kook, Ma Sook-hyun, Lee Myong-sup. Architects: Kang Eun-sung, Kang Suk-kyu, Lee Jae-yong, Lee Eun-jin, Kim Ki-hun, Park Sung-nam, Son Dong-wook, Andrew Zago, Anthony Caradonna, Carlo Baumschlager Dietmar Eberle, Carlos Castanheiro, Clark E. Llewellyn, Didier Fiuza Faustino, Florian Beigel, Hiroshi Innami, Ken Kao.
[184] Architectural guidance: construction location, volume, material, landscape methods, etc. Kim Jong-kyu and Kim Jun-sung have formulated the specific architectural landscape.

in South Korea. Each bridge had to be good enough to uplift the cultural value of Heyri Art Village as one of the world's most celebrated new developments. All the buildings and houses have to be no higher than three stories. Overall, the scenery of Heyri will consist of native trees and flowers. All efforts are to be made to ensure that it is a place for the beauty of wild and natural flora to be rediscovered. Native flowers, which burst into full bloom in season, are thus being planted everywhere.[185]
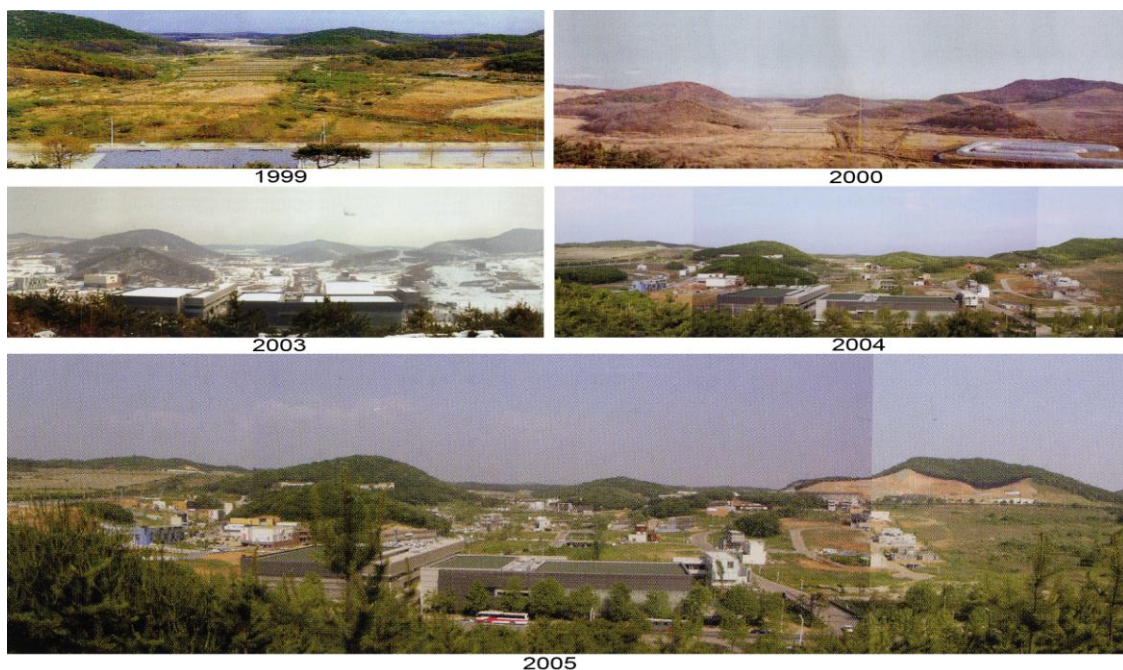

Figure 5.14: Development of Heyri Art Village (1999 – 2005).[186]

Heyri Art Village is definitely not meant to be another city of suburbia, but instead a city on a human scale, one which sits in harmony with human nature. Whereas the original ecological swamps are being conserved, waterways

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[185] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 120.
[186] Image source: http://www.heyri.net/blog/.

consisting of natural creeks and streamlets will also be restored and improved.

5.2.3 Architectural Productions

The selected architects[187] are challenged to provide new conceptual and systematic possibilities for the composition of space, form, and structure, as set out within the Heyri's architectural guide. Heyri's architectural rules (construction, location, volume, material, landscape methods, etc, all of them written by Jong-kyu Kim and Jun-sung Kim) were formulated to realize specific architectural landscape. Also, all the architectural designs must be approved by the architectural committee (Myong-whan Lee, Kyung-kook Woo, Sook-hyun Ma, Myong-sup Lee). The systematic limitation allows only 34 pre-authorized Korean architects – as selected by recommendation committee consisting of 19 architecture professors nationwide – and 6 preauthorized foreign architects to design all structures within Heyri. Other architects must be specially approved by the architectural committee. Overall, enhancing the physical characters of material properties in detailing and minimalistic formal architecture are the most common form of expression in Heyri.

In most cases, architectural structures contain galleries that require much wall space, thus most forms of architecture in Heyri appear to have too many walls. Others express the importance of intertwining nature within the architectural

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[187] Foreign architects :Andrew Zago, Anthony Caradonna, Carlo Baumschlager Dietmar Eberle, Carlos Castanheiro, Clark E. Llewellyn, Didier Fiuza Faustino, Florian Beigel, Hiroshi Innami, Ken Kao, Kojima Kazuhiro, Laurent Salomon, Mikan, SHoP (Sharples Holden Pasquarelli), Stanley Saitowitz.

concept, while others are interested in re-examining and expressing Korean traditional architecture as the concept. A few examples exhibit the architect's unique interpretation of ecological longevity instead of the norm of architectural longevity. Also, the buildings show the mashed effects of logic and organicism:

> Heyri's form focuses on relationship formation between artificiality and nature with nature at the centre. Artificial space interposes between nature in which green network connects nature and neighboring nature, engaging environmental discourse. Consequently, Heyri's architecture provides anti-geometric municipal landscape away from rendering point of view.[188]

There are more than thirty small or medium-sized museums in Heyri. The subject include these: international folk instruments, toys, butterflies, magazines, traditional foods, Buddhist art, figure paintings, stamps, films, film posters, etc. There are six major galleries in Heyri: The Gallery Cheongam, Lee Nam-kyu's's Memorial Hall, Kwang-young Gallery, Baek Soon-sil Gallery, Korean Ceramics Museum, and The Vietnam Museum. Altogether, however, around thirty galleries hold regular shows of paintings, crafts and ceramics. Heyri is the third-generation town of galleries, following Insa-dong and Chungdam-dong. But Heyri is different from the two precedents in terms of natural environment and the closeness to artists. There are numerous small concert halls and recital

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[188] Sang-leem Lee, *Consilient Mapping:Nine Probes for Architecture Korea* (Seoul, Space Publishing Co, 2007) p 201. Transversely situated architecture maintains linear shape as the centre moves along with usage pattern of architectural programs or cultural programmes in "recognition-central" formal system which facilitates characteristic of functional new municipality form.

studios for chamber music. Classical music cafes and jazz cafes and high standard concerts are on throughout the year including at the Korea Music Hall, VR Concert Hall, Camerata Music Hall, etc. Heyri also has Kim Jung-hee's Theatre, and The Oral Narrated Fairy Theatre. Plays of the highest quality are staged here, and seasonal drama courses are organized. There are movie studios (Art Service), a cinematheque, and the international folk film museum also in Heyri. Cinema houses of unique themes are built and associated with the film festivals. There are film schools for aspiring and promising filmmakers, in which adult educational programs for film lovers are also prepared. There are around ten halls to hold seminars on philosophy, history, literature, and art regularly, or intermittently. Heyri has The House on a Lotus, Dostoevskii Institute, The Sijo, Korean ode, Museum. There are more than fifty guest houses for Heyri members, commissioned artist, art-lovers, and foreign visitors. A plan for honorary membership system is currently being considered. Around one hundred art shops and antique shops keep articles of contemporary artists and antiques in stock to sell and exhibit. It has Park Yu-sook's Gallery, KAIS Gallery, Sumi Gallery, The Gallery Focus, Jin Ad, etc. There are around thirty bookstores specialized in art, architecture, film, music, literature, and children's books, or bookshops both of western and eastern classics, and antiques. A book museum, libraries, elegant book cafes are also in plan. Heyri has Hangilsa.corp, YoulHwaDang Publisher, Donghwaanra, etc. There are more than one hundred workplaces for painters, craftsmen, sculptors, musicians, and filmmakers. Lease studios are available for young artists in making. There is a memorials for Han-Sook Jung, the prominent writer, in Heyri.

I Like Dalki (Dalki Theme Park)[189]

Starting from the premise that architecture can be fun, Ga.A Architects, Mass Studies and Slade Architecture have joined forces to design a building where, says one architect, 'the adult distinctions between work and play do not apply'. Dalkhi theme Park revolves around Dalkhi – the Korean word for 'strawberry' – an imaginary character invented to market clothes and other products for children and teenagers, and Korea's answer to Japan's Hello Kitty. Drawing inspiration from the fantasy world of cartoons in which anything is possible, this architectural collaborative came up with an eye-catching entertainment complex to house Dalkhi and friends – all of whom are modelled on fruits and vegetables.
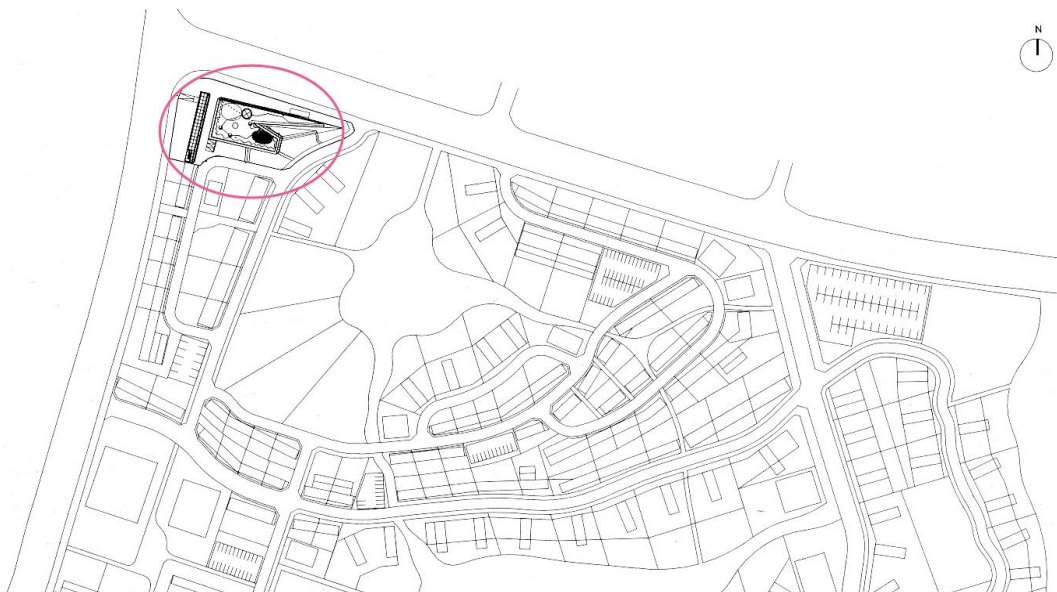

Figure 5.15: Site location.[190]

[189] Architect: Choi Jeong-hwa+o, Uk Na-lm, Eunju. interior design: Choi Jeong-hwa. Landscape design: Lee Sung-kyung. Location: h-74 Heyri Art Village, Beopheung-ri, Tanhyeon-myeon, Paju-si, Gyeonggi-do, South Korea.
[190] The north-western corner of the Heyri site is surrounded by low hills to the west, Dongmyo Park to the north, and a shopping mall complex to the east. Site area: 1,019.3m². Total floor

The open-plan layout is intended to offer relatively unobstructed vistas throughout the interior, provide a high measure of transparency between different activities, and break down the boundaries between adult-oriented sections, such as galleries and office, and child-friendly play area. As a result, all zones merge to form one integrated, if slightly overwhelming, combination of experiences.
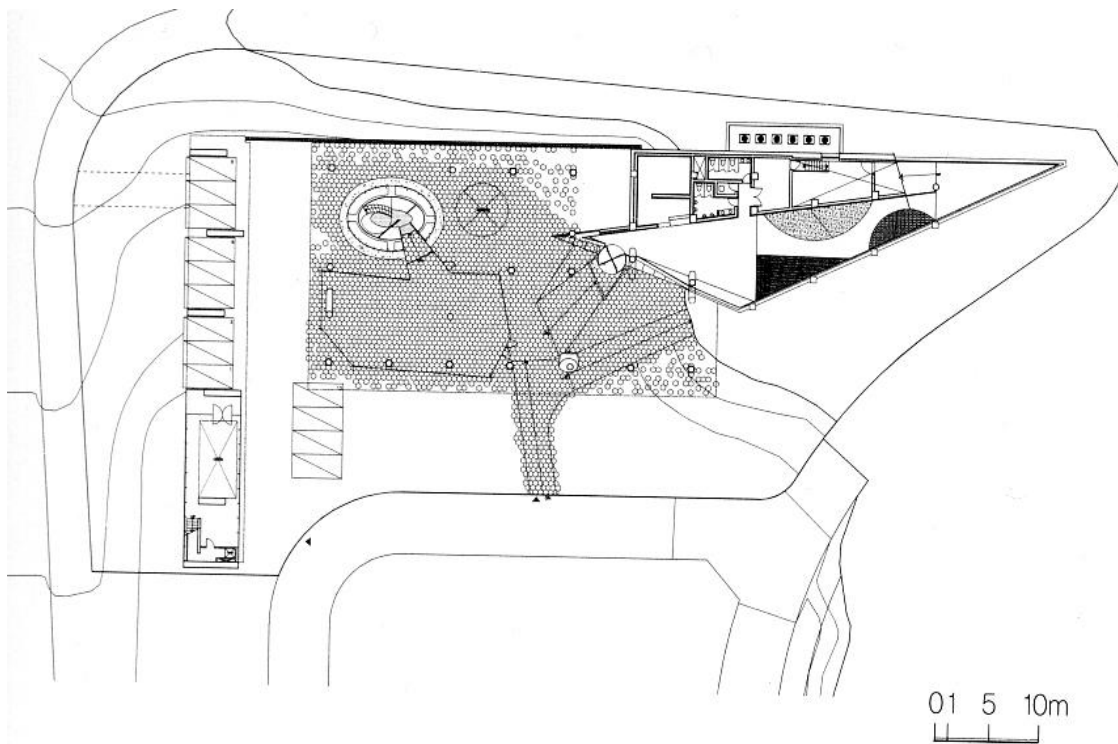

Figure 5.16: 1st Floor plan.[191]

south elevation

section

0 2 5 10m

Figure 5.17: South elevation and section.[192]

Figure 5.18: Ground floor view.[193]

Envisioned as a landscape in which visitors learn not only how to cultivate their

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[192] Image source:
http://www.noticiasarquitectura.info/especiales/massstudies_dalki_theme_park.htm.
[193] Vibrant colours – chiefly pillar-box red, mint green and turquoise – enliven the scene. These are augmented by a range of materials, from hardwoods to foam and rubber, which protrude from the floor in round bumps to define seating areas. Image source:
http://www.noticiasarquitectura.info/especiales/massstudies_dalki_theme_park.htm.

own gardens, but also about more general environmental issues, the building

required space for temporary exhibitions and group discussions, a theatre, a

cafe, a lounge area and a retail store. The architects took the rolling landscape

as the starting point for the form of the building, which blends into the

surrounding terrain. Pulsating with colour and light, the angular multivolume

structure rises from the landscape like a UFO about to take flight.

Figure 5.19: The roof garden.[194]

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[194] The roof garden – accessed along an extended grass-covered ramp built into the slope of the hill or by means of an interior staircase – boasts a king-size fruit and vegetable sculptures, a feature that illustrates the overall concept of play and a convergence of the real and the imaginary. Convex and concave skylights offer views into the interior, while visually and physically connecting the various spaces in the building. Everything in sight invites exploration. Image source:
http://www.noticiasarquitectura.info/especiales/massstudies_dalki_theme_park.htm.

Interior Spaces[195]

The ideas of negotiated space are most acute beneath the building. The artificial landscape, with psychedelic overtones of colour and pattern, is dotted with giant sculptures of Dalkhi and her pals, who break up the space and provide points of orientation. Embedded within the soffit overhead are 'performative surfaces' such as misters, heaters, air jets and speakers. The ground plane is moulded into a patchwork of flat, steep, smooth and rugged zones. This area is a playful den of varied atmospheres that intrigue the visitor and invite interaction.

Figure 5.20: Interior spaces for children play.[196]

Torque House

Torque House is a three-story, 134-pyeong (1 pyeong equals 3.3 square

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[195] The interior of the main floor was inspired by Dalkhi's cartoon house. Oversized furniture that looks as if it was plucked from a scene in Alice's Adventures in Wonderland adds to the fairytale mood that pervades the complex. The floor slopes at startling angles, disorientating the visitor and tempting kids to slide across the smooth surface.
[196] Image source: http://kidsfuninseoul.wordpress.com/2011/10/07/dalki-theme-park/.

meters) building that contains living space for four family members, with workspace for both the husband, who is a sound engineer, and his wife, who is a painter. It took two years to complete, from design to construction, and in the process created a synthesis through clashes between several pairs of contrasting dynamics.

Figure 5.21: Torque House exterior.

The working space that he specified had to comprise a music performance room that can accommodate up to 30 orchestra music performers and another room where he can monitor, record and edit music performances through a sound-proof window. In contrast with his wife, who required a space with right angles, he presented the requirement that planes defining the interior space, such as walls, floor, and ceiling, should not be in parallel due to his acoustic requirements. Furthermore, in order to create an optimal sound environment, he patiently explained scientific knowledge related to sound, such as insulation of sound, soundproofing, acoustic absorption, and sound reverberation to us,

people who were almost ignorant about sound in the beginning. For instance, consideration of acoustics was given top priority in all aspects of creating the studio, including size, location and details of windows, while emotional aspects had to be satisfied at the same time. In addition, considerations of the social use of the workspace required a small kitchen in which one can prepare and eat snacks while people are working through the night, and an external space for smoking, a small performance/rest area, and capitalizing on a rooftop area.
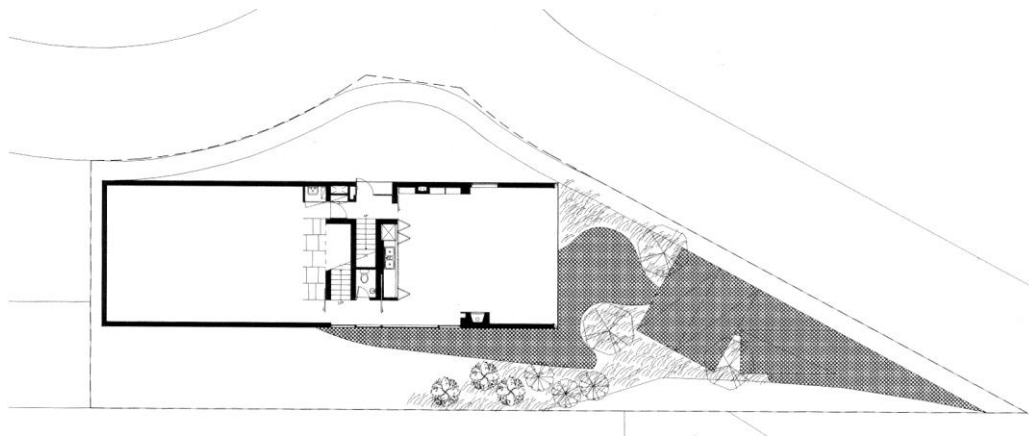
1st Floor plan
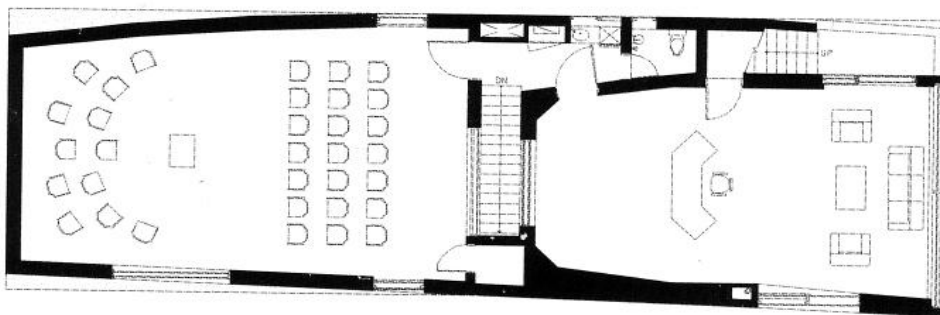
3rd Floor plan

Figure 5.22: Floor plans.[197]

The wife, who modestly introduced herself as a 'painter who paints boring still-

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[197] Image source: http://www.architecturenewsplus.com/projects/1308.

life paintings such as flower vases', also concisely suggested requirements for her studio, using as an example highly stylish buildings that she was not quite fond of in Heyri Art Valley. It should also have a high ceiling for large paintings, and the space should be symmetrical to give a sense of stability, and the studio should be rectangular, without any precarious acute angles. On the other hand, the husband, who is a classical music recording engineer, wanted a studio fit for social purposes, even though he has a quiet personality. Due to the fact that he needs to invite musicians with whom he has to collaborate, the music performance/recording studio should also be a social venue, considering the needs and characteristics of a sound engineer. At the same time, he wanted the space to allow independent circulation so as not to disturb other residential spaces in the house and his wife's atelier.
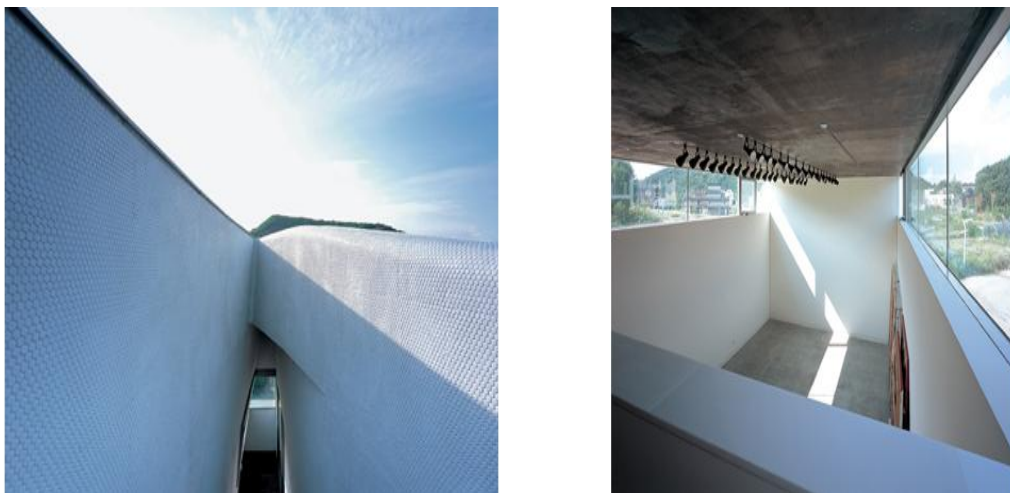

Figure 5.23: Interior spaces.[198]

The interior spaces needed however to have an appropriate amount of natural

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[198] Image source: http://www.architecturenewsplus.com/projects/1308.

light, and the space should be clearly separated from other functions of the

building interior yet at the same time should be selectively connected to the

building interior and have a separate entrance from the outside.

5.2.4 Another Issue

Due to the communal purpose of culture and art, Heyri carries a purpose unique

to the location that caters to indoor and outdoor festivals, events and visitors

throughout communal space. Therefore, the relation between and among

individual architectures and residents surfaces as an important question. Heyri's

municipal environmental character merited specific spatial resolutions. In

general, the idea of the patch plays a vital role as public space for the

community whereas relational arrangement becomes the key issue for

architecture which means architecture should be based on mutual relational

communication between patch and architecture. More flow of communication

means a breakdown of elements of divisions. This poses another issue. Most

structures are thus multi-purpose buildings[199] that mix residential and public

space, so that a greater flow of communication may invade the usual residential

privacy, since an over-emphasis on residential privacy would only cut off flows

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[199] Museums: Here are now 30 small or medium-sized museums such as for international folk instruments, toys, butterflies, magazines, traditional foods, Buddhist art, figure paintings, stamps, films, film posters, etc. Art galleries: there are 46 art galleries such as Gallery Cheongam, Nam-Kyu Lee's memorial hall, Kwang-Young Gallery, BaekSoonsil Gallery, Korean ceramics museum, etc. Music halls: Korea music hall, VR Concert Hall, Camerata music hall, classical music cafes, jazz cafes, etc. Drama theatres: Jung-Hee Kim's theater, oral narrated fairy theatre. Cinema house: movie studios, cinematheque and international film museum, and also film schools. Seminar rooms: ten halls such as Lotus, Dostoevskii institute, the Sijo, Korean ode, museum. Guest houses for native plants: 50 guesthouses for Heyri members, commissioned artists, art-lovers, and foreign visitors. Art shops, antique shops: there are 100 shops which sell and exhibit articles of contemporary artists and antiques. Workshops: there are 110 workplaces for artists, musicians, and film- makers.

of communication. The difficulty of course lies with resolving these conflicting concepts in lived practice. Started with much ambition, the condition of Heyri after the global economic recession from 2008 is much more commercialised and tacky in feel today.

5.3 Paju Book City (1989 – Present)[200]

Paju Book City (PBC) has been planned as a city for the print media and combines innovative architecture and a humane environment with a heavy-duty economic and infrastructural requirements. Located a half-hour drive to the north-west of Seoul, this site aims to function as a self-sufficient metropolis which is capable of covering every step of the publishing process – from publishing, distribution, printing, bookbinding and design back to papermaking through to and copyright negotiations. Paju Book City is hence a national complex for culture and industry. It is now still in the process of being constructed on a 1,584,000m^2 site around Paju in Gyeonggi-do, on the periphery of Seoul, but has been largely formed already. The project is intended as a place devoted to planning, producing and distributing books by high-quality publishers, cultivating the adoption of an individualistic culture which is

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[200] The first phase of Paju Book City is approximately 875,343 sq.m of built volume with 35% devoted to production facilities (306,573 sq.m), 9% to distribution facilities (77,088 sq.m), 2% to cultural facilities (18,017 sq.m), 4% to support facilities (35,088 sq.m), 10% to green area and parks (87,838 sq.m), 20% to roads (176,943 sq.m), and 14% to waterways/canals/open water (123,115 sq.m). The remaining 6% (50,681 sq.m) has been partitioned for various uses, including offices, equipment storage, bookstores, shopping area, and mixed-use residences. 160 unique building structures have been built in the first phase.
The second phase of the Paju Book City plan is connected to the left side of the first phase. As of March 2008, the second phase consists of approximately 685,623 sq.m divided into 101 companies-including 61 publishing companies, 21 printing companies, and 19 film companies. The second phase seeks the concentration of the media and film industry within the Book City.

prevalent in the internationalized and globalised era of the 21st century, by

establishing 'a town centre for creating knowledge and information'[201] right at

the heart of national development in South Korea.

> The open space or the empty space is often considered to be public space in the
>
> western world. But in our terms, open and void is not just for the space, it rather
>
> concerns about transparency of the land when conceiving the landscape. The core
>
> center of the Paju book City has plenty of spaces of morphological scheme – the
>
> public spaces – considering that the major issues of forming this center, multi-
>
> layered planes and its empty nature are what have allowed to recognize public
>
> activities in both the city and the landscape. Surely the qualities of the building and
>
> the nature of those empty spaces need to be defined; the spaces could be fully
>
> used for public spaces as space within the landscape which is interconnected with
>
> the all of the planes and permits it to imagine new types of land, geographically
>
> with natural multi-layers of the land, where the center locates itself.[202]

The Korean architect, Seung H-sang, for example, advocates the introduction of

indeterminate public space as one of the major objectives of the Paju Book City.

According to him, 'the goal was first to secure empty places'.[203] When

confronted with such ideas in practice, one then notices that the place –

centredness developed by architects like Kim Swoo-geun is combined in Paju

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[201] Sik-hung Kim, *Plan for Revitalizing Gunggido* (Gunggido: Institute of Gungi Development, 2007).

[202] H-sang Seung, *The Story of Paju Book City: Through Wind and Rain* (Seoul: Book City Culture Foundation, 2008) p 140.

[203] H-sang Seung, *The Story of Paju Book City: Through Wind and Rain* (Seoul: Book City Culture Foundation, 2008) pp 32-60.

Book City with the 'landscape urbanism' ideas from the west. In this case, the practice of place-centredness means that the site and the external places need to be given priority when one is constructing any building.

Figure 5.24: Paju Book City location.

Figure 5.25: Mapping territory – Paju Book City and surrounding area.

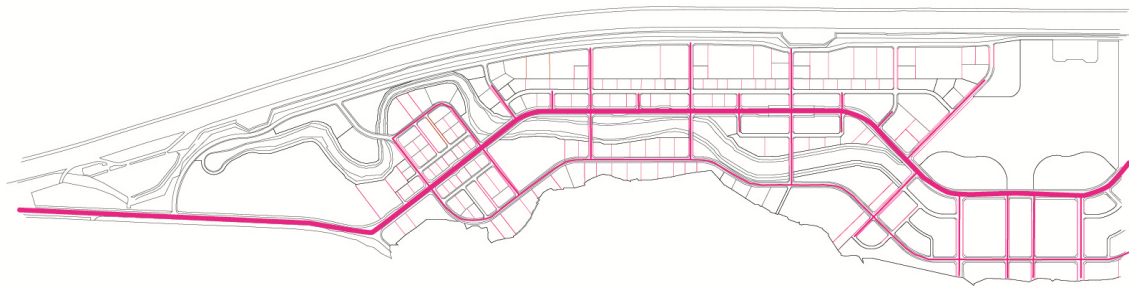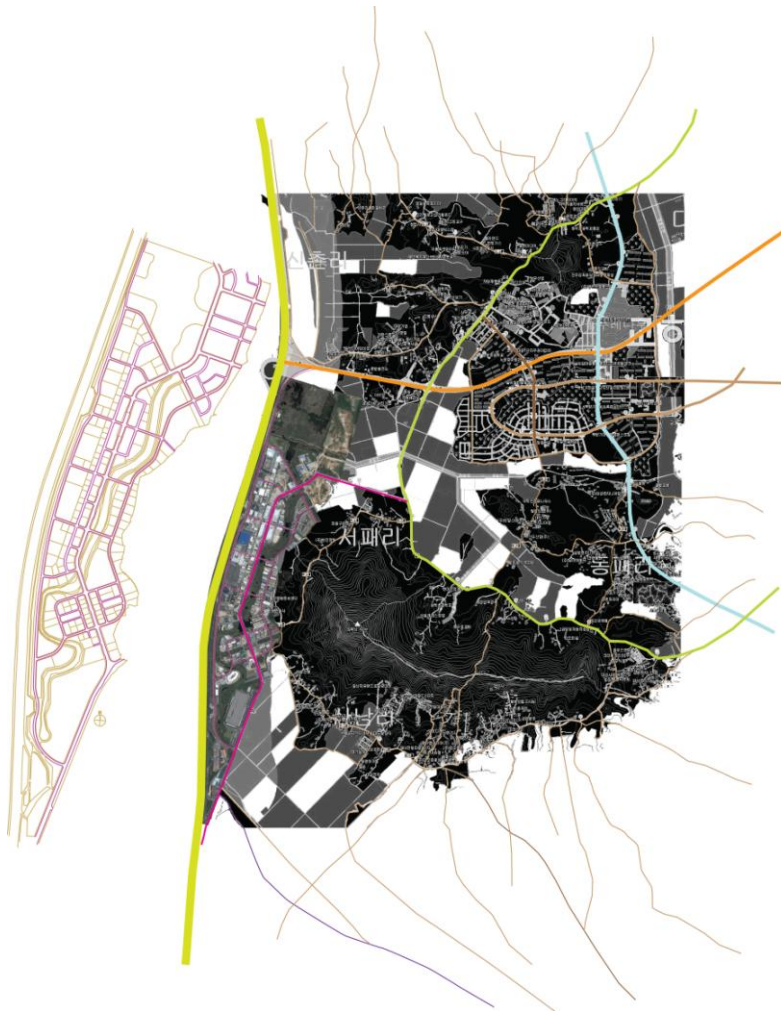Figure 5.26: Mapping network (road) – Paju Book City.

Figure 5.27: Mapping network (road) – Paju Book City and surrounding area.

Originally the construction of the 'Jayu-ro' (Freedom Expressway)[204] made the

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[204] Jayuro starts at the Digital Media City in Seoul and follows the banks of the Han River past Paju Book City, Heyri Art Village, and Imjingak Peace Park before stopping in front of the DMZ.

site of Paju Book City separated slightly from the coastline. The coastal marsh was situated at the lower level of the expressway, and the reeds and a 2km-long system of waterways become a protected ground for various living organisms to prosper. Throughout the different seasons, flocks of migratory birds and beautiful sunsets compose a picturesque landscape in this area. Paju Book City thus adapts to the environment, based on the central idea that human beings always want to live in harmony with nature. This has been adopted as the central tenet of life in this new publishing community.
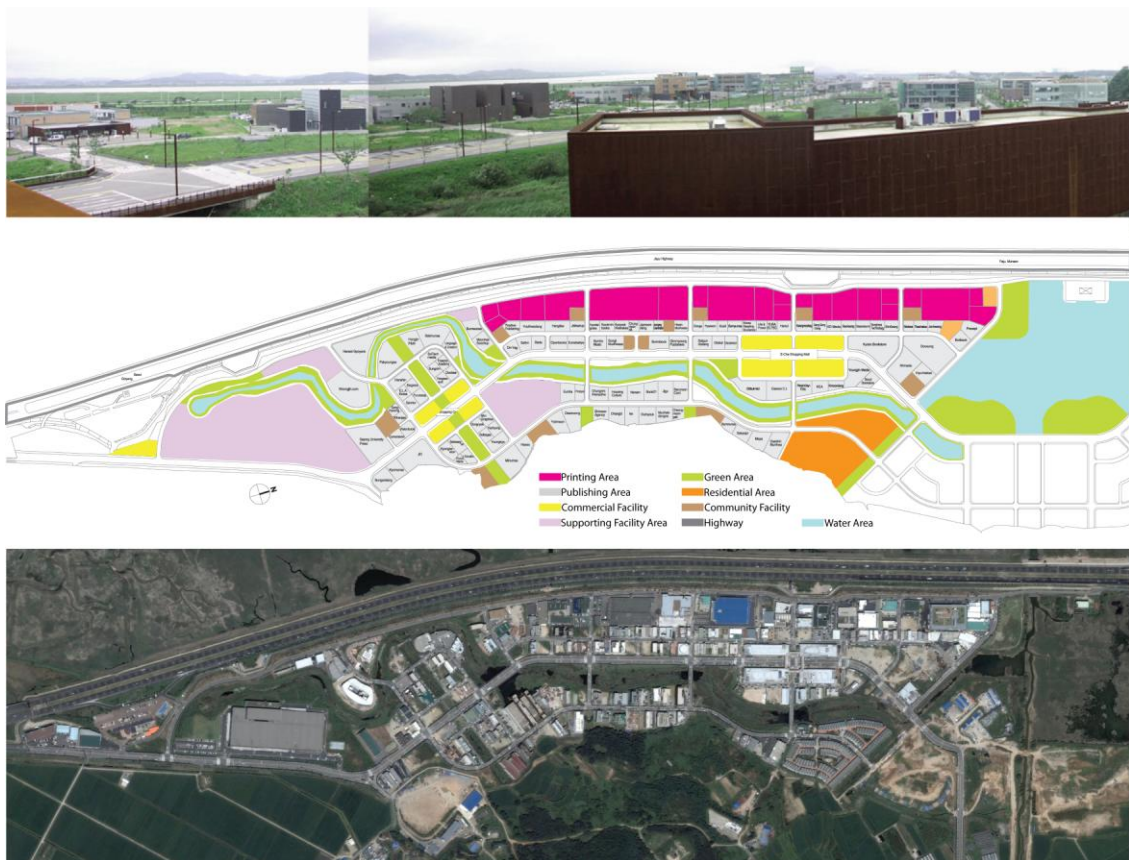

Figure 5.28: Paju Book City plan.

Eventually, when the Korean peninsula is unified, Jayuro will extend all the way to Gaesong and Pyeongyang, creating an enormous 'cultural belt' along the western coast of the peninsula.

Another nickname that hence has become attached to Paju Book City is 'Eco-City'. This name reflects the vision of the complex as a city that is designed to exist in harmony with nature and even to evolve through time, artificial though it may seem – in the sense of the place actually being highly planned and built from scratch. An existing stream flows through the centre of the complex, attracting many cranes and other migratory birds. Architectural forms are then set up to be part of the landscape of assemblages rather than symbolic forms in themselves, and furthermore they work as an infrastructural framework to host human settlements in what is portrayed by the designers at least as a timely, natural process.

5.3.1 Urban Design

Initiating a certain size of planes and allocating the distances between, linking them together and finally flowing them without any disturbance to move. Whether a void or emptied space is called as a street or as a square or as a park, which was not a great problem in the time of the previous growth of new town development. But it is very consequential matter nowadays and must be an essential element in citing the new cities. According to this concern, the void – someone called "it becomes the uncertain space" – was a specific matter for the planning of the Center in the book city and also the emptied space as well.[205]

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[205] H-sang Seung, *The Story of Paju Book City: Through Wind and Rain* (Seoul: Book City Culture Foundation, 2008) p 24.

Figure 5.29: Urban design.

Basing its decisions on the selected master-plan, the design board in charge of

the Paju Book City project proposed several domestic and international

architects[206] for each building lot. The individual owners of these plots –

publishing houses or related industries – either then accepted these

recommended figures or chose their own architects, whose designs were

subject to approval by the design board. While the owners of the individual

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[206] Participating architects are:
Florian Beigel, Suh Hailim + Junsung Kim, Yung-ho Chang, Young-sub Kim, Moon-sung Kwon, Manuel Gausa, Moon-gyu Choi, Yoon-gyoo Jang, Kyung-kook Woo, Jong-ho Yi, Seung-hoy Kim, Du-nam Choi, Hyun-sik Min, Il-hoon E, Jong-kyu Kim, Sung-yong Joh, Sejima Kazuyo + Nishizawa Ryue, Wook Choi, Seo Hyun + Cemong Architecs, Kwang-hyun Kim, In-cheurl Kim, Min-suk Cho + Ki-su Park, Won Kim, Min-ah Lee + Daniel Valle, Stan Allen, Byung-hyun Kim, Chul-rin Bang, Chung Guyon, Hyo-man Kim, Kishi Waro, Alexandro Zaera-Polo + Farshid Moussavi, Xaveer de Geyter, Bong-ryol Kim + Seung-hee Kang, Vicente Guallart, Byung-yoon Kim, Young-joon Kim.

buildings were thus responsible for their own designs, the overall aesthetics of the cityscape in Paju Book City are being carefully managed. Buildings, for example, are to be no more than four storey high. Dividing walls between lots are forbidden. The Korean architects Seung H-sang and Kim Young-joon are acting as coordinators for the entire project, and the Graduate School of Environment of Seoul National University developed the basic master-plan. The urban landscape concept has been led by Florian Beigel at London Metropolitan University's Architecture Research Unit (ARU). Proposed and built projects are required to follow architectural design guidelines set out by the core design team of Florian Beigel, Min Hyun-sik, Seung H-sang, Kim Jong-kyu and Kim Young-joon.

The Second Phase of the Paju Book City
The second phase of Paju Book City had been planned since the initial construction of the first phase. The plan calls for 685,623 square meters to be connected to the left side of the first phase area. The second phase seeks the concentration of the media and film industry within the Book City. The second phase, merging publishing and film, will complement the first phase of Book City, which as yet lacks the scale and substance of a self-sufficient city. As of March 2008, the second phase consists of approximately 685,623 square meters divided into 101 companies-including 61 publishing companies, 21 printing companies, and 19 film companies. In order that small-scale firms with talent and vision are able to have their own offices, a small-lot development policy was introduced. This also includes plans to install incubator facilities for young,

talented, visionary but otherwise small publishers and film-makers.

The biggest difference between the first and second phase was the latter seeks to integrate film, thus overcoming the limitations of a Book City that might have focused solely on publishing and its related industries. For this purpose, in regard to the construction a film complex, Tcha Sung-jai of Sidus-FNH and Yi Eun of MK pictures collected the opinions of the film industry, and for the printing world, Choi Hyun-su of Adsland Printing and Jang Hoe-un of Yein Art International, and for the publishing world, Park Gwang-sung of Thinking Tree, all actively participated in refining the plans for the second phase of Paju Book City. A land use plan has been devised and a total of 198,763 square meters has been divided into industrial lots for the film industry, publishing businesses, commercial printing, and printing-related business. Divided into 32,339 square meters of cultural facilities and 52,457 square meters industrial facilities, the plan is to unify the various facilities of the cultural industry through a joint-development method. In terms of public area, 20,000 square meters of residential lots to be used as public housing for employees of resident business. The second phase of construction, providing important research material for cultural anthropology, is expected to bring about the desired integration: it will be possible to create benefits and mutually functional supplements through the integration of publishing and film-related industrial facilities. Contents produced through publishing will be reworked as film, and contents created through film will be immediately reborn as into new forms of cultural products.

The Third Phase of the Paju Book City

For the third phase, a plan to combine books, broadcasting, and communications is being discussed. In terms of the goal of connecting with the first and second phases, the plan is to complete Book City as a multimedia city. While creating a cutting edge media city focused on humanity, culture, and the environment, the plan preserves the spirit of rice farming practiced throughout our history in the 3,300,000 square meters of farmland around Paju Book City. The third phase entails the problem of how digital and network technology can be used and managed along with broadcasting, communication, and their textual sources.

Figure 5.30: Event city.

5.3.2 Architectural Design Guidelines for Paju Book City

1. Objectives of the city: these are multiple, and include a desire to create an eco-friendly ecological city; a three-dimensional city of diversity and multiplicity; a self-sufficient city that supports daily urban routines; a visually slow city; a city of beautiful scenery; and a city that adapts to change.

2. Understanding of the terrain: From a visual standpoint, it is seen as imperative that the ecological space of the Han River has been preserved and reflected. The region's landscape, in both the manmade elements – the reclaimed land with waterways, downtown Seoul and the airport and *Jayuro* expressway that connects to North Korea – together with the natural elements – the Han River, the contours of the mountain range across the river, Mt. Simhak – provide the backdrop to the whole complex and accords the city a most intriguing visual diversity.

3. Urban structure: The outline of the forms found in the Paju Book City complex all lie in a visual field that slopes toward the waterway – the line formed by the verdant roofs of factories under the shade of the highway; the line of publishing houses in the distance; the line of other publishing buildings which are densely populated in the mid-section of the city; and the curving line of the buildings located by the dyke to the east of the waterway. The gaps between these lines

allow for an uninterrupted view from the Han River to Mt. Simhak, thereby

creating a clear distinction between the east and west parts of the new city.

Figure 5.31: Building types and building materials.

4. Building types: the buildings in Paju Book City are intended to become

spaces of 'specific indeterminacy.' This architectural space also provides room

for human imagination to unfold – hence the concept of emptiness of a space

whose function has not yet been determined. Thus, it follows that the building

type is determined not by its function or utility but by the method of construction, and is then adjusted according to each area of the city and its surrounding environment, as well as by its building materials. There are 3 primary types, as follows:

-Wall type: Buildings placed side by side to create a uniform line of walls;

-Gazelle type: Buildings with pillars like the lithe legs of gazelles;

-Podium type: Buildings constructed on top of podiums that are meant to resemble massive rocks in a swamp of reeds.

5. Building materials: To preserve the city's natural scenery, building materials have been strictly regulated, and only those that meet the following conditions may be employed:

-Materials appropriate for the three types of buildings as classified by construction method;

-Natural materials that reflect authentic historical periods in Korean architecture;.

-Economic feasibility;

-Materials that can be manufactured domestically in mass quantities.

6. Base designs: The designs and materials used for the external surfaces, decks, and roofs have to take into account the particular characteristics of the exterior space in Paju Book City, which is a wetland ecosystem divided by many waterways. For the floors, therefore, pre-cast concrete blocks, rubble, wild plants, and tarmac are used as the basic materials.

7. Waterway planning: The waterways and its tributaries that flow through the Paju Book City complex were a decisive factor in planning the city as an "urban wetland" ecosystem. Along with the man-made lake, this waterway system is essential for sewage and flood control and so requires meticulous planning.

5.3.3 Forms of Architectural Types in Paju Book City

> They wide opened the sites which became transparent, possible to see the
>
> mountain backyard towards the Han River front which flows in parallel with the land
>
> of Paju Book City. Certainly we were not able to realize the area of the place and
>
> location, form of the building as well, because of the uncertain spaces – the "void".
>
> Deciding its form means establishing the form of the inhabited environment which
>
> was once a wild and wet land in terms of the opening of the place.[207]

A number of conceptual types have been devised for Paju Book City. A building type called the 'Highway Shadow' is being created as an architectural form situated below the level of *'Jayu-ro'* (Freedom Expressway), for which the buildings are mostly used as mass-production facilities such as print shops and factories. The height of these new buildings is taken up just to the shadow line of the highway in the horizontal dimension and their roofs are going to be covered with greenery. Another building type, called 'Bookshelf Units', consists of a series of chopped pieces of built volume extended in a east-west direction,

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[207] H-sang Seung, *The Story of Paju Book City: Through Wind and Rain* (Seoul: Book City Culture Foundation, 2008) p 120.

thus allowing the residents to have unobstructed visual access to the Han River and Mt. Simhak beyond. 'Stone', in contrast, is a type of built space in which its massive form seems as if they are a huge rock situated in a field of reeds, creating an urban manifestation of the operating ecological condition. 'Canal Loft', meanwhile, is arranged in rhythmic lines along the waterway, generating a panorama of sublime landscape. 'Urban Island' is situated wherever all four sides of the site happens to be surrounded by roads, in which case its mass is broken down by a series of narrow alleys for easy access, and to create intricate networks of interactions between the building's users.
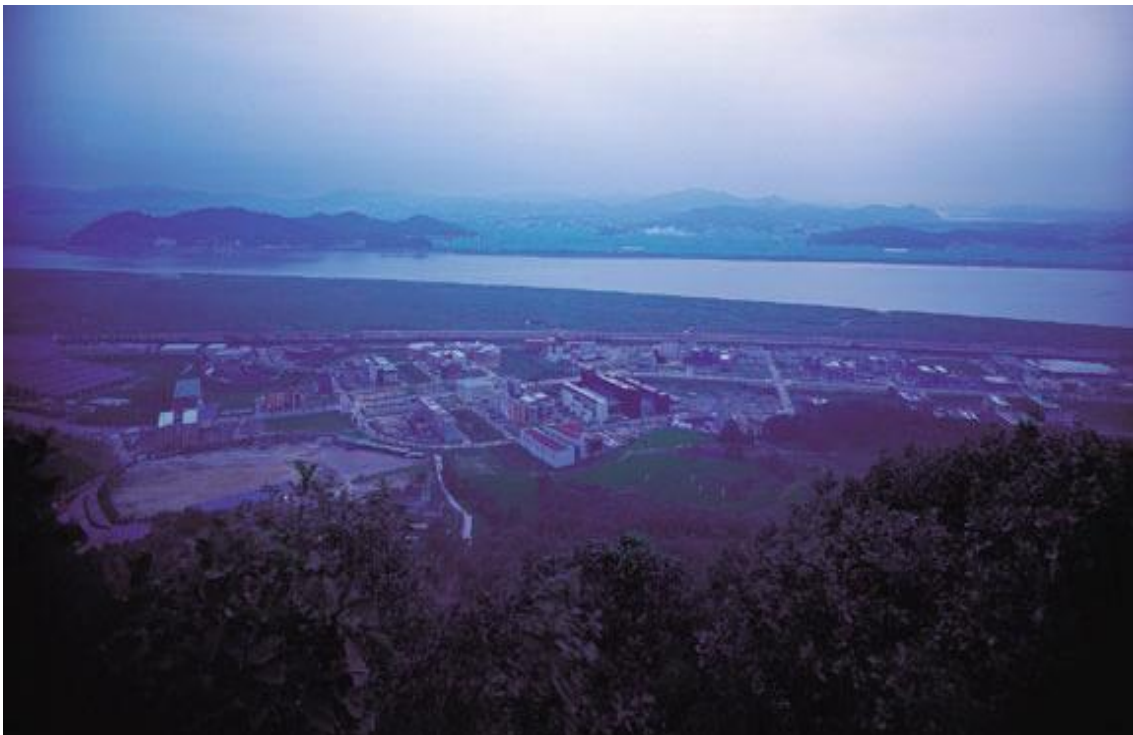

Figure 5.32: A view from Mt. Shimhak.[208]

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[208] Image source: http://aru.londonmet.ac.uk/works/paju/.

House of Open Books[209]

Figure 5.33: House of Open Books exterior and entrance.

Located in Paju Book City, type of the building was given namely "Bookshelf Type", of which the enclosed bar spaces are to be layered with voids in between. From the Han River on one side to the Simhak Mountain on the other, each bar building is organized through folded walls to produce continuous perception and circulation. Yet two bar buildings contain different kinds of artificial landscape to produce connection; one with folded translucent glass screen located in the centre of the building where light penetrates as one moves through, and the other with the concrete folded wall wrapping the edges of the building as one negotiates the movement along the boundary.

Borim Publishing House and Marionette Theatre[210]

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[209] Architect: Jun-sung Kim, Hai-lim Suh, Paju, Gyeonggi-Do, Korea, 2005.

Figure 5.34: Borim Publishing House and Marionette Theatre exterior.

As "Bookshelf type" in Paju Book City, the building is organized with two vertical bar buildings providing office space for children's books publishing house which intersect with horizontal marionette theatre. While the vertical volumes contain the multiple curved horizon lines embedded on the flat surface of the perforated metal panels, which seems invisible from the outside, yet the view towards outside is clearly perceived from the inside. The marionette theatre's undulating structure has been generated from the animated fluctuating gravity lines based on movement. Given that the puppets' feet float up from the floor, the theatre is slightly lifted from the ground at the eye-level of children.

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[210] Architect: Hai-lim Suh, Jun-sung Kim, Paju, Gyeonggi-do, Korea, 2004-2005.

5.4 Digital Media City (1992 through to 2014)[211]

> One of the most exciting aspects of Digital Media City is the opportunity it presents
>
> to create a real-time urban laboratory in which a range of emerging media
>
> technologies may be field-tested and refined. As a flagship new town in the world's
>
> foremost tech-savvy city, Digital Media City can take a lead role in the development
>
> and refinement of personal and community digital information technologies. The
>
> development of Digital Media City presents a unique opportunity to create a new
>
> kind of digital media laboratory where homes, schools, and the workplace all
>
> become parts of a great urban experiment in 21st-century living. Combining the
>
> innovative prowess of Korea's existing media and information technology sectors
>
> with the technological sophistication of Seoul's cosmopolitan population, DMC will
>
> be a place where the world watches digital media be seamlessly woven into all
>
> aspects of business, personal and community life.[212]

The Digital Media City (DMC) project on the fringes of Seoul sets itself the task

of combining the attributes of information technology, natural environment and

culture. The scope of participation has then been narrowed down to those

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[211] 1992 unveiling of the Master Plan for Strategic Development of five Centres (Yeouido,Yongsan, Sangam, Ttukseom, and Magok) to celebrate 600th anniversary of Seoul's foundation as South Korea's capital. 1997 Announcement of a plan to transform Sangam into Seoul's new future northwestern business centre. 1999 Unveiling of New Seoul Town Development Plan - a comprehensive regional development plan including hi-speed railline to Incheon International Airport. 2000 Unveiling of Sangam New Millennium Town Master Plan, encompassing DMC(560,000m²), environment-friendly Eco-Village (7000 household units), and Millennium Park (3,630,000m²). 2001 Completion of DMC Master Plan to create a leading city/hosting high-tech digital media business from home and internationally. 2002 Completion of IT Infrastructure Master Plan to construct hi-speed information network interconnecting wired, wireless and satellite communications. 2003 Completion of DMS Master Plan
[212] Michael L. Joroff, Dennis Frenchman, Thomas Campanella, Anthony Townsend, and Alexis Bennett, *Digital Media Street: The City as Product Laboratory*, (Massachusetts: Massachusetts Institute of Technology, 2002) p12.

businesses that are engaged in creating digital cultural content and software, which includes broadcasting, computer game design, film-making, animation, music and digital education. Not only that, DMC is going to be fully outfitted with international-level research and education centres, along with the associated industrial support facilities.

5.4.1 Size

Set in an area of 560,000m², the DMC Project is to act as the focal part of the even larger Millennium City Development Project (6.6km²), which includes the Millennium Park on 3.6km² of land and a supposedly environment-friendly residential complex with 7,000 units. DMC is conceived as playing the role of an economic, technological and cultural bridge between the Pacific Rim and interior Asian continental regions. Digital media businesses, research and education centres of international stature are thus planned to move into DMC, and their advanced technologies intended to integrate with South Korean traditional culture to form in effect.

> Laboratory DMC can improve the quality of the lives of those who reside, work in,
>
> and visit the DMC by making available a unique variety of services and
>
> experiences. Laboratory DMC will provide a test bed and showcase for innovative
>
> services and products and will, because of its scale, promote the Korean spirit of
>
> entrepreneurship and innovation as well as make this spirit known around the
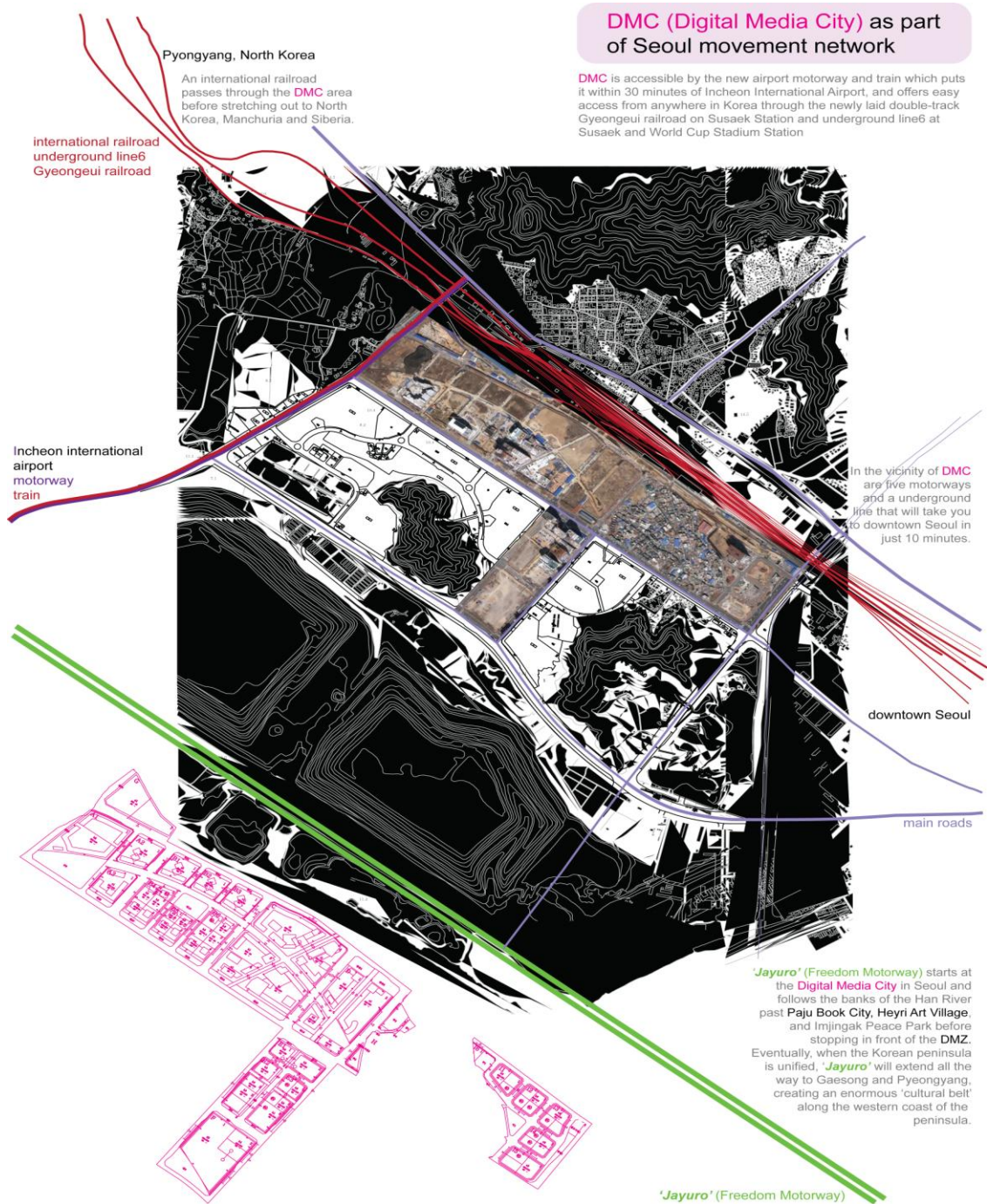
world. The scope for innovation is limitless.[213]

Pyongyang, North Korea

An international railroad passes through the DMC area before stretching out to North Korea, Manchuria and Siberia.

international railroad
underground line6
Gyeongeui railroad

DMC (Digital Media City) as part of Seoul movement network

DMC is accessible by the new airport motorway and train which puts it within 30 minutes of Incheon International Airport, and offers easy access from anywhere in Korea through the newly laid double-track Gyeongeui railroad on Susaek Station and underground line6 at Susaek and World Cup Stadium Station

Incheon international airport
motorway
train

In the vicinity of DMC are five motorways and a underground line that will take you to downtown Seoul in just 10 minutes.

downtown Seoul

main roads

'Jayuro' (Freedom Motorway) starts at the Digital Media City in Seoul and follows the banks of the Han River past Paju Book City, Heyri Art Village, and Imjingak Peace Park before stopping in front of the DMZ. Eventually, when the Korean peninsula is unified, 'Jayuro' will extend all the way to Gaesong and Pyeongyang, creating an enormous 'cultural belt' along the western coast of the peninsula.

'Jayuro' (Freedom Motorway)

Figure 5.35: DMC mapping network.

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[213] Michael L. Joroff, Dennis Frenchman, Thomas Campanella, Anthony Townsend, and Alexis Bennett, *Digital Media Street: The City as Product Laboratory*, (Massachusetts: Massachusetts Institute of Technology, 2002) p18.

5.4.2 Location

DMC is located in Sangam-dong, Mapo-gu in the western region of Seoul and the northern side of Han River. It is seven kilometres away from the downtown areas while linking easily to Incheon International Airport and Ilsan City. Just across Han River to its south are the Yeouido broadcasting district and Gimpo Airport, while the Sinchon college town and Mapo business district are conveniently located nearby.
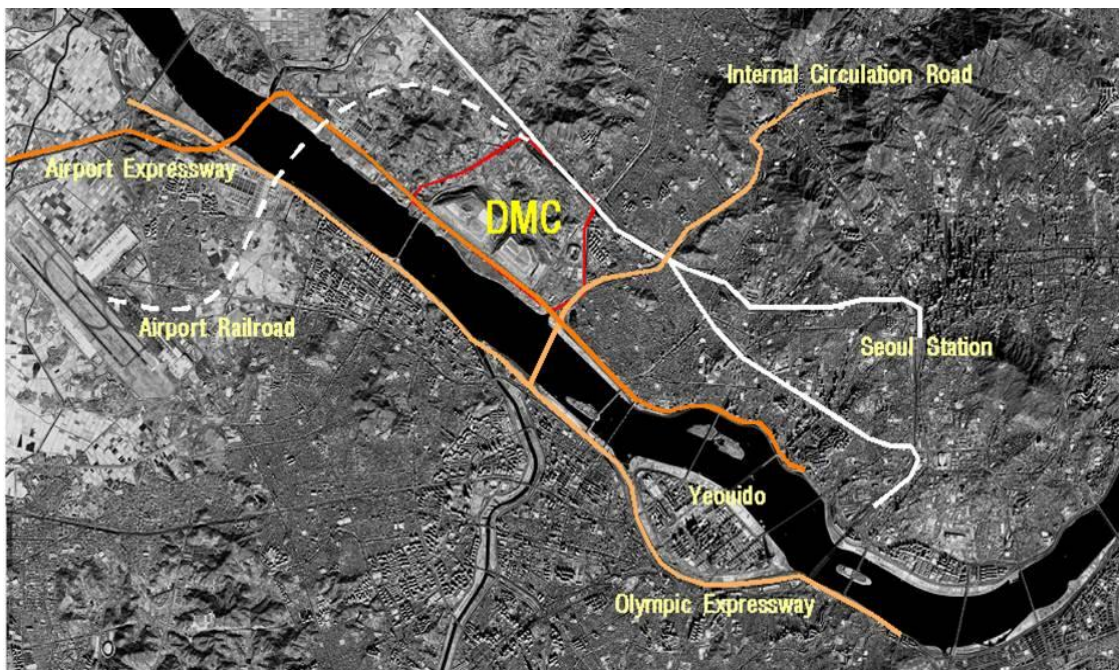

Figure 5.36: Accessibility.[214]

Digital Media City focuses heavily on building structures such as TV

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[214] Image source:
http://dmc.seoul.kr/cop/bbs/selectBoardList.do?bbsId=BBSMSTR_000000000003&menuId=MNU_0000000000000118.

broadcasting stations, along with internet and digital satellite broadcasting systems together these are expected to have much influence on related industries due to the high level of media integration. They offer Digital Media City welcomes the occupancy of any enterprises that create digital media technology and software, or else use digital media strategies to support their core business operations. These companies may even include firms providing financial services, biotechnology and pharmaceutical research centres, transportation technology companies, corporate consulting firms, telecommunications service providers, and a range of others. The diversification of these commonly linked enterprises will help to underpin the long-term success of the Digital Media City. This is because technology clusters around the world have discovered from experience that diversifying their social capital base is necessary for continuous renewal and innovation required to tide over the normal swings in economic and technology cycles.

5.4.3 Elements

DMC will provide the world's best information/communication infrastructure. Thanks to the broadband and optical network system capable of real-time transmission of moving images, the DMC will offer seamless round-the-clock, high-speed communications service to corporate tenants at an affordable price. DMC is backed by a stable supply of skilled manpower educated in its vicinity. 70,000 graduates, including 20,000 with doctorate and master degrees, are produced each year by the 43 universities and 13 colleges in Seoul, and 7

universities near the DMC will turn out graduates trained in business fields sought by DMC. DMC is taking a development pattern of its own so as to create conditions good for both work and leisure. The DMC features strong support from Seoul City and the national government. Specifically, Seoul City operates the Industry-Academy Collaborative Research Centre (i.e., a venture office building), the High-Tech Industry Centre (i.e., an apartment-type factory) and a rental housing complex for foreigners while the IT Complex (a project of Information & Communication Ministry) and the Cultural Contents Complex (a project of Culture & Tourism Ministry) are operated by the national government. The total budget set aside for the 388-acre housing development, which encompasses the DMC area, is about 1.6 trillion Won including the costs for land purchase, development and construction works on community and infrastructure facilities. And like in the cases of previous housing development projects, some of the investment capital will be recovered through land sales.

M&E and IT businesses, developers and investors that participate in establishing an IT education & training centre, main leading facilities, broadcasting software & high-tech business facilities, education & research institutes and convention centres. For facilities essential in activating the complex, the Seoul Metropolitan Government makes direct investments or carries out joint development with private investors. High-tech business buildings are leased out to tenants for the long term, based on low interest rates. Enterprises creating the technology and content for the media and entertainment industry are the initial targets for recruitment. The Digital Media

City seeks the occupancy of any enterprises that create digital media technology and software or use digital media strategies to support their core business operations. These companies may include firms providing financial services, biotechnology and pharmaceutical research centres, transportation technology companies, corporate consulting firms, telecommunications service providers, and a range of others. The diversification of commonly linked enterprises will underpin the long-term success of the Digital Media City. Technology clusters around the world have discovered that diversifying the social capital base is necessary for continuous renewal and innovation required to tide over swings in economic and technology cycles

5.4.4 Urban Design

The east side of DMC saw the completion of Seoul World Cup Stadium and Peace Park at the end of 2001. A 52-acre site has been set aside for housing and environmental development, and old residential areas are currently under renovation. The west side of DMC is in close vicinity to the Gyeonggi-do region, mostly surrounded by a Green Belt, and there are military facilities and a runway for light airplanes at Hankuk Aviation University. According to the Military Air Base Law, height restrictions will be imposed on some areas in the west side. To the south, an environmentally friendly residential complex will be formed for 6,250 family units in a housing development zone around Mt. Sangam-san, while the Nanji-do landfill has been reborn as World Cup Park with 873 acres of land.

Figure 5.37: DMC urban design.

Gyeongeui Railroad (Susaek Station) and the Ilsan-bound Susaek-ro (expressway) will cross the northern part of DMC. Susaek Station has the potential of being developed into a multiple terminal, while long-term comprehensive urban space plans for infrastructure, public facilities and private buildings of DMC are being drafted for the whole area of Susaek-dong, Eunpyeong-gu. A zoning plan was established for the areas (about 270,000m² in total) surrounding Susaek Station and adjacent to DMC (an area at 72 Susaek-dong and an area at 222 Jeungsan-dong).

Development plans for the area have significance from a long-term point of view in that Susaek Station is expected to be an important station eventually, with the on-going construction work for the Seoul-Sineuiju Railroad linking South Korea with North Korea, China, and Moscow. A station for Seoul Subway No. 6, Susaek Station is also expected to be a candidate for the southern terminal for the South-North High-Speed Railroad after the reunification of two Koreas. Between Susaek Station and the heart of DMC, there is an area in the size of 195,000m² in total designated for improving residential conditions. Ramshackle houses will be replaced with new ones, while new parks will be formed and roads expanded and arranged anew as a part of the city 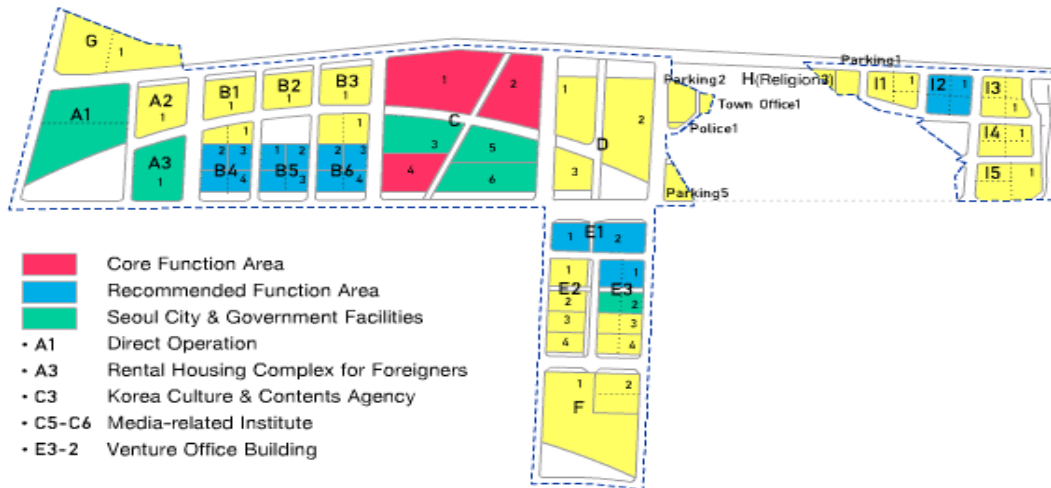plan to improve the living conditions for the residents. The area is expected to provide those in DMC with an area for rest and recreation with new ones, while new parks will be formed and roads expanded and arranged anew as a part of the city plan to improve the living conditions for the residents.

Figure 5.38: DMC land use.[215]
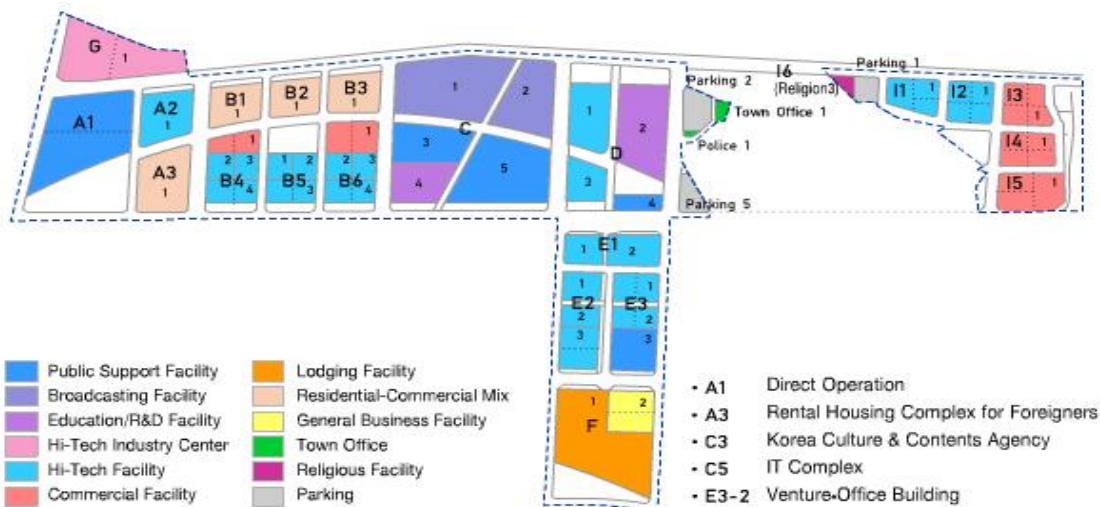

Figure 5.39: DMC land supply.[216]

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[215] DMC is divided into different districts for development. Each of these districts will have its own specialized functions, and they are formed of the appropriate facilities to suit their different functions. Image source: http://dmc.seoul.kr/cop/bbs/selectBoardList.do?bbsId=BBSMSTR_000000000003&menuId=MNU_0000000000000118.

[216] Multimedia-related Facilities: production facilities of multimedia products, media & entertainment studios, media production centres, venture business integration facilities and multimedia business offices.
R&D Facilities: research institutes for technological development and technological management and exchange centres. Educational and Supporting Facilities: complex management centres, internet data centres, urban information management centres, and information and telecommunication infrastructure facilities. Image source: http://dmc.seoul.kr/cop/bbs/selectBoardList.do?bbsId=BBSMSTR_000000000003&menuId=MNU_0000000000000118.
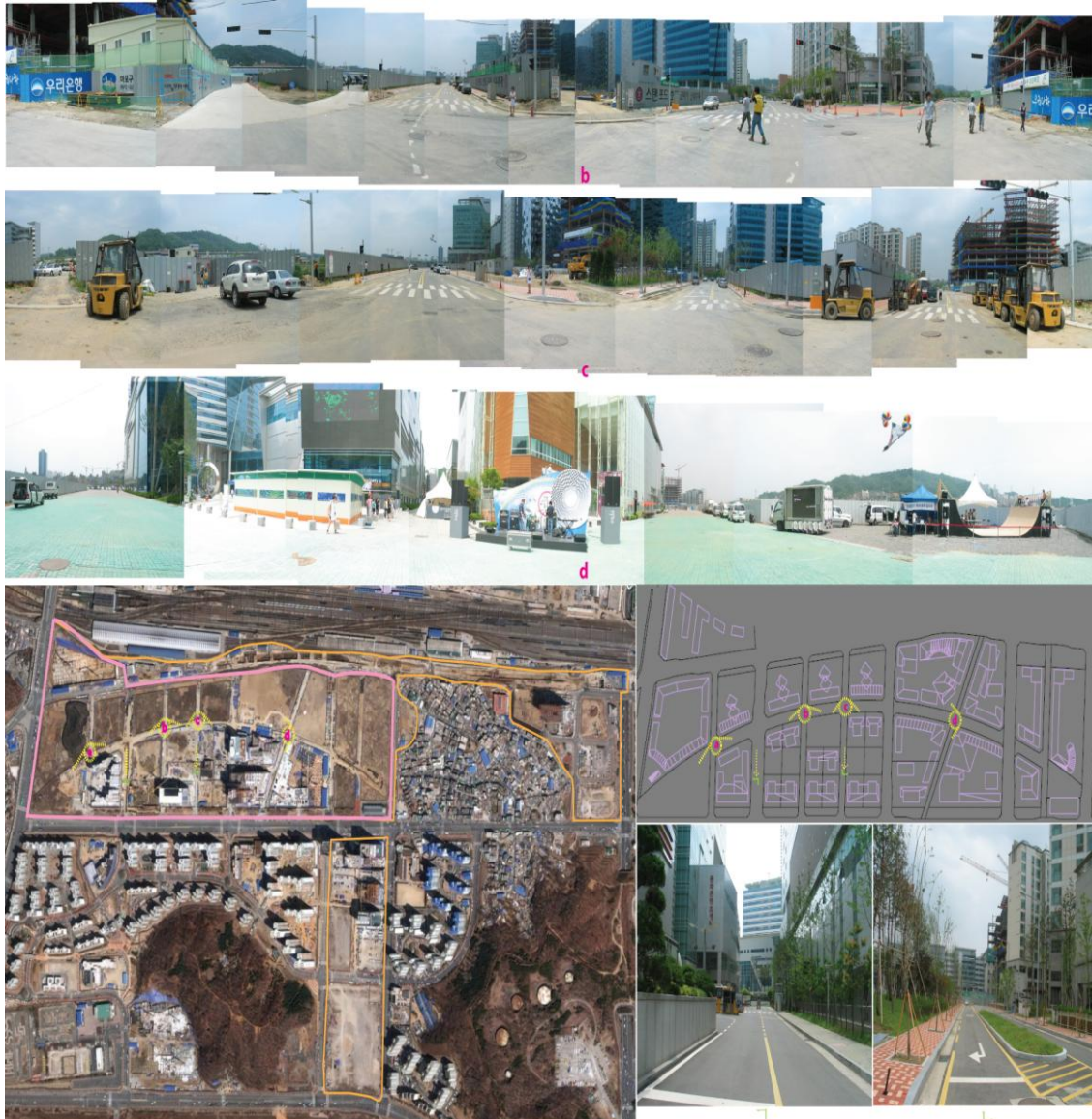
5.4.5 Digital Media Street[217]

Figure 5.40: Digital Media Street location.

[217] Concept of Digital Media Street: Dynamic experiential space forged through a variety of activities (e.g. events, performances and gatherings), A major tourist attraction that allows visitors to experience leading technology 24/7 and is capable of demonstrating Korea's, To utilize the DMC as a testing ground in which participants can experiment with cutting-edge IT products, To create the world's first-ever ubiquitous avenue.

The so-called Digital Media Street (DMS),[218] which is located as the main spine and 'boulevard' of DMC, is designed to act as an experimental urban space for cutting-edge media technology and its contents. This is to be where innovation will be embraced, day in and day out, and in a variety of ways. For instance, specially designed structures and fixtures, ranging from the IP-Intelight (artificial intelligence-based street lamp) to the Info-Booth (information kiosk), will be installed on the street in several phases. Digital Media Street will thus provide the whole world with a living laboratory of tomorrows lifestyle served by blending new technologies and physical amenities. Once completed, it will provide a fully inhabited test-bed for new concepts which marry together culture, work, entertainment, lifestyle and technology.
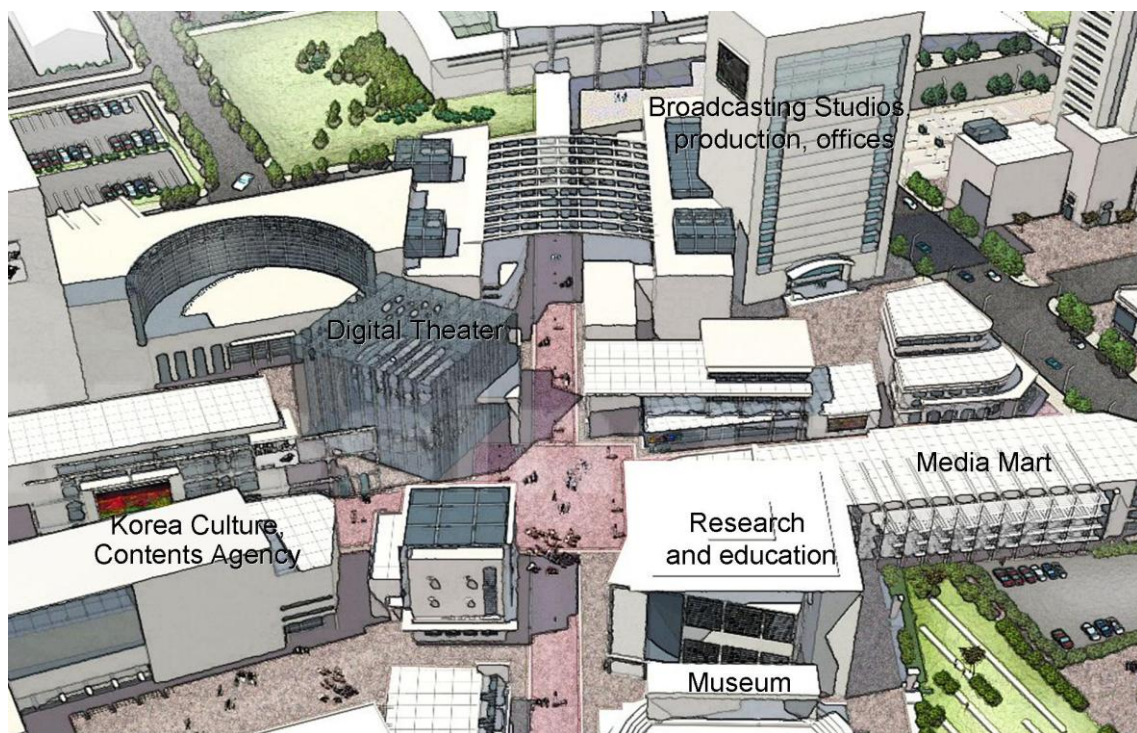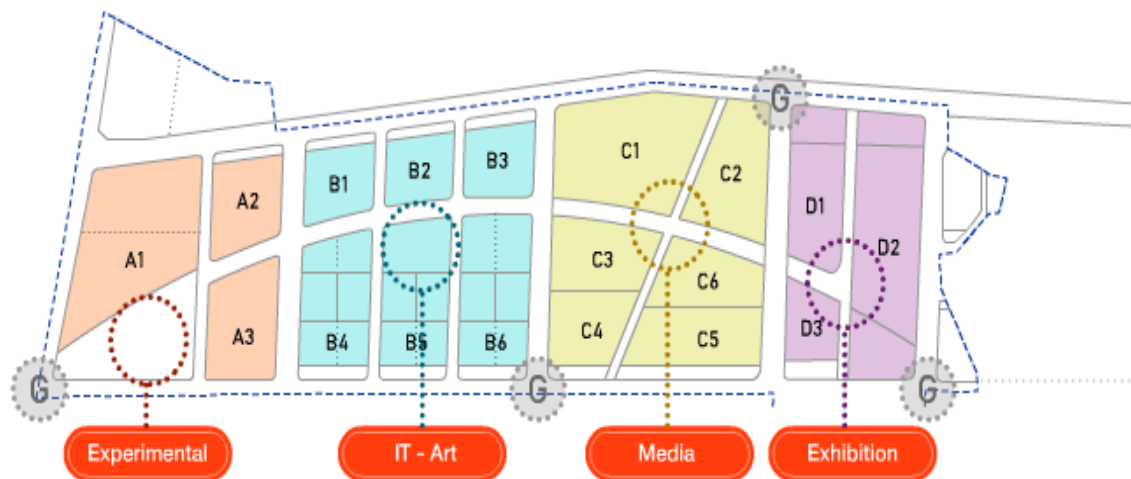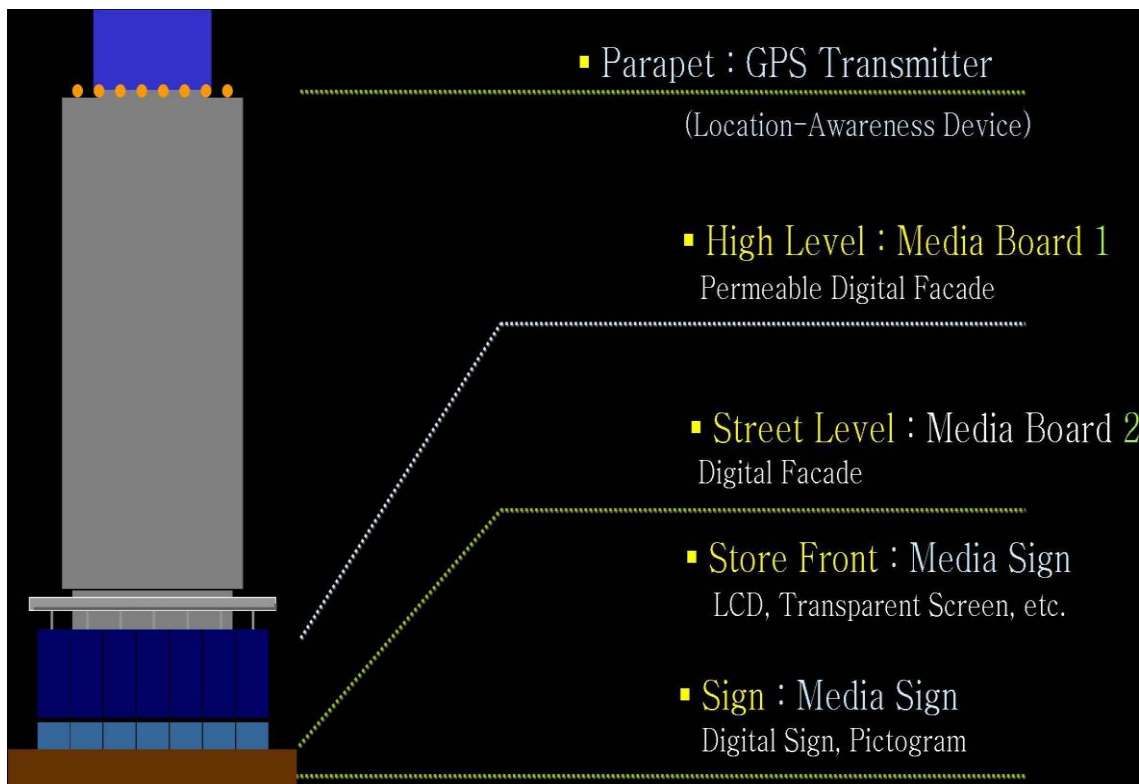

Digital Media Street

Figure 5.41: Digital Media Street.[219]

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[219] Experimental Park: a wireless environment that extends the workplace and responds to changes in movement temperature, wind, light.

IT-Art Park: community focus for digital art and life with outdoor installations, galleries, creative artists living and working there.

Digital Media Plaza: a place for culture, performance, broadcasting, events, meetings shopping and eating; it is to create dense visual and sensory environment

Exhibition Park: high-intensity centre for urban entertainment, accommodation visitor activities and a symbolic focus linking all parts of DMC. Image source: Jin-kyu Kim, Investing in Seoul's Digital Media City-W walk on The Digital Media Street (Seoul: Mungdang, 2008) p 37.

The digital mediation of the DMC's homes and workplaces can also enhance the

ability of people to more fully function and respond to the complexities of life. With

new products, services and systems, the home can become the digitally connected

center for all of family life, education, entertainment and health care. And, with

similar developments, the mediated workplace can blend physical and virtual

space, allowing people to do more creative knowledge work and work anytime,

anyplace and with geographically distributed teams – a requirement of our fast-

paced, global economy.[220]

- Parapet : GPS Transmitter
  (Location-Awareness Device)

- High Level : Media Board 1
  Permeable Digital Facade

- Street Level : Media Board 2
  Digital Facade

- Store Front : Media Sign
  LCD, Transparent Screen, etc.

- Sign : Media Sign
  Digital Sign, Pictogram

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[220] Michael L. Joroff, Dennis Frenchman, Thomas Campanella, Anthony Townsend, and Alexis Bennett, *Digital Media Street: The City as Product Laboratory*, (Massachusetts: Massachusetts Institute of Technology, 2002) p 44.
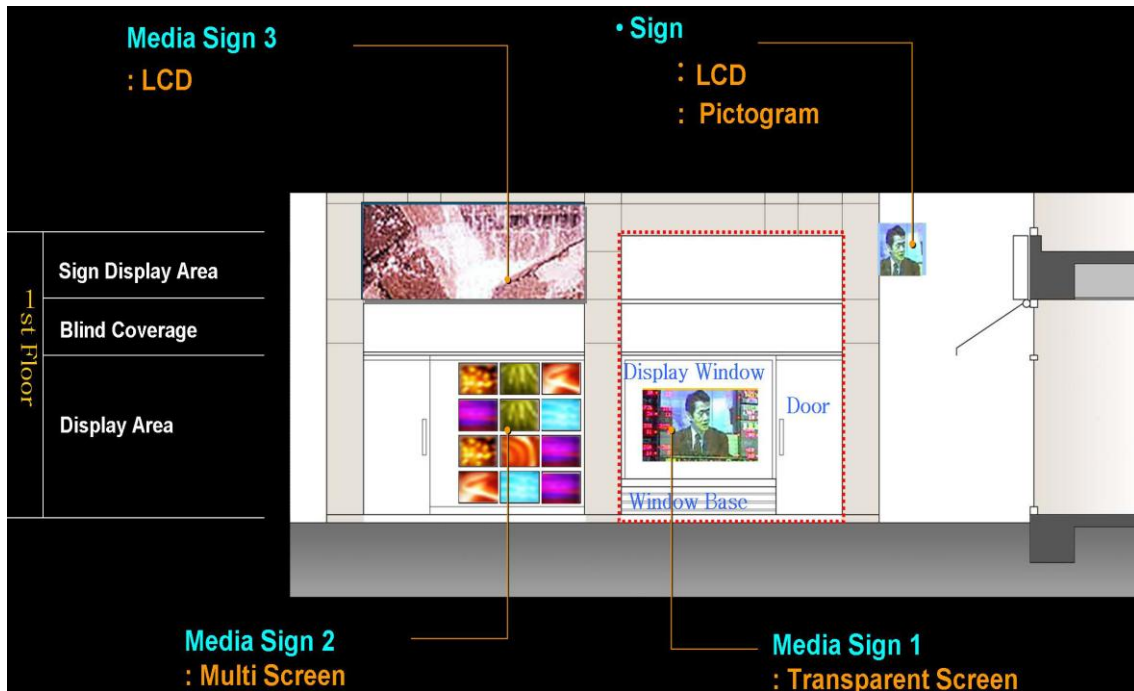
Figure 5.42: Digital Media Street networks.[221]

The central boulevard of DMC has been envisioned as a Digital Media Street in

which a host of exciting new enablers can be launched, studied and refined. The

most promising of these "mediate" between the bricks-and-mortar city and the

invisible network of information. Bits will be rejoined with bricks, and bring the city

alive with place-specific knowledge and information.[222]

The use of digital media in the public environment here will be available at three

levels of interaction. On the personal level, this will happen in DMS wireless

communications through cell phones, digital assistants, or portable computing

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[221] Image source: Jin-kyu Kim, Investing in Seoul's Digital Media City-W walk on The Digital Media Street (Seoul: Mungdang, 2008) p 38.
[222] Michael L. Joroff, Dennis Frenchman, Thomas Campanella, Anthony Townsend, and Alexis Bennett, *Digital Media Street: The City as Product Laboratory*, (Massachusetts: Massachusetts Institute of Technology, 2002) p 25.

devices. At street level, these networks are to be connected embedded in or connected to physical objects, places, public display devices, and sensory objects. At the cyber level, it will involve meta-sources of aggregated data, monitoring and programming that are able to support people's activities on the street and will be available to all of its users.[223]
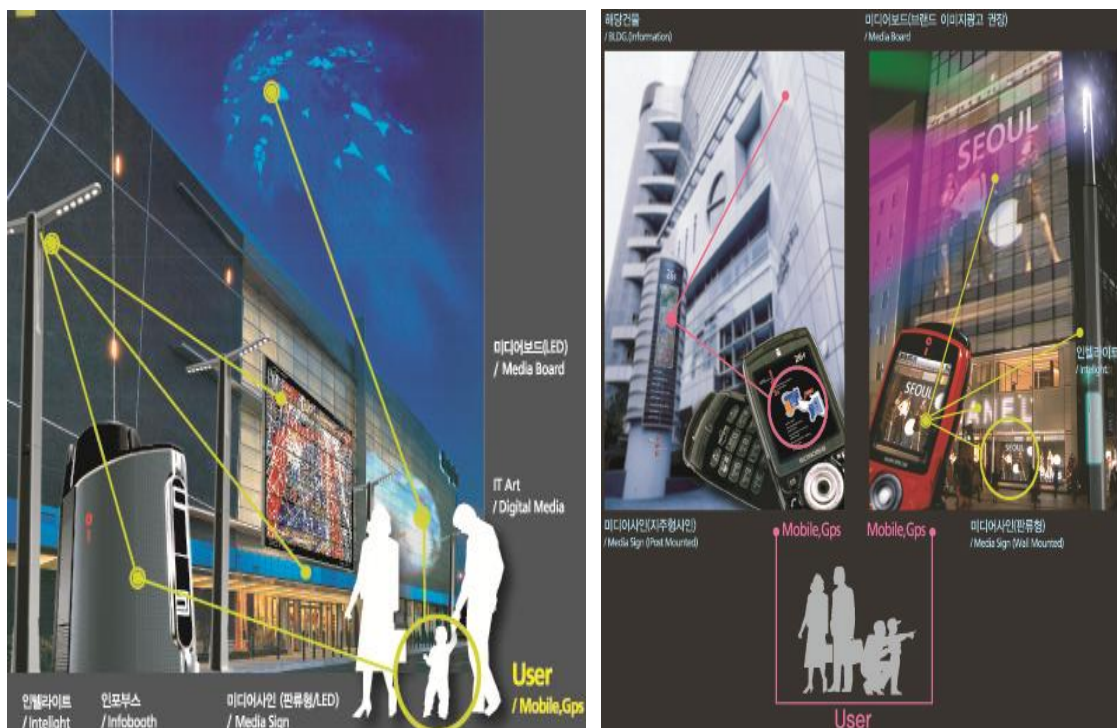

Figure 5.43: Digital Media Street. The use of digital media in the public environment.[224]

I activated the Location Context on my PDA and immediately viewed some of the

activities that were happening on the street that evening. I saw that a large crowd

---

[223] Many of the technologies envisioned for the new street are already available or are being developed around the world. The aim of the Digital Media Street is to bring them together in an experimental public environment to see what develops in terms of new uses, activities, behaviours, and physical forms. Places of the third domain will thus emerge out of interactions among these dimensions to produce new types of urban experiences.

[224] Image source: http://dmc.seoul.kr/cop/bbs/selectBoardList.do?bbsId=BBSMSTR_000000000003&menuId=MNU_0000000000000118.

of mostly young people was gathered around the Sister Wall, which connects to

Seoul and other cities around the world. A number of them were dancing in mirror-

image to other young people on a large screen located somewhere else in the

world. It looked as if they might be in Oahu. I also saw that the digital game plaza

was full of spectators watching the Korean semi-finals for those who would be

eligible to represent Korea at the international competition. I scrolled down the

screen to get a preview of the exhibits in the galleries on the street and found an

exhibit about Tibetan art that I wanted to see, and then I strolled down the street to

the location that was noted on the screen. It was several blocks off the main

street.[225]

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[225] Jin-kyu Kim, Investing in Seoul's Digital Media City-W walk on The Digital Media Street (Seoul: Mungdang, 2008) p 33.
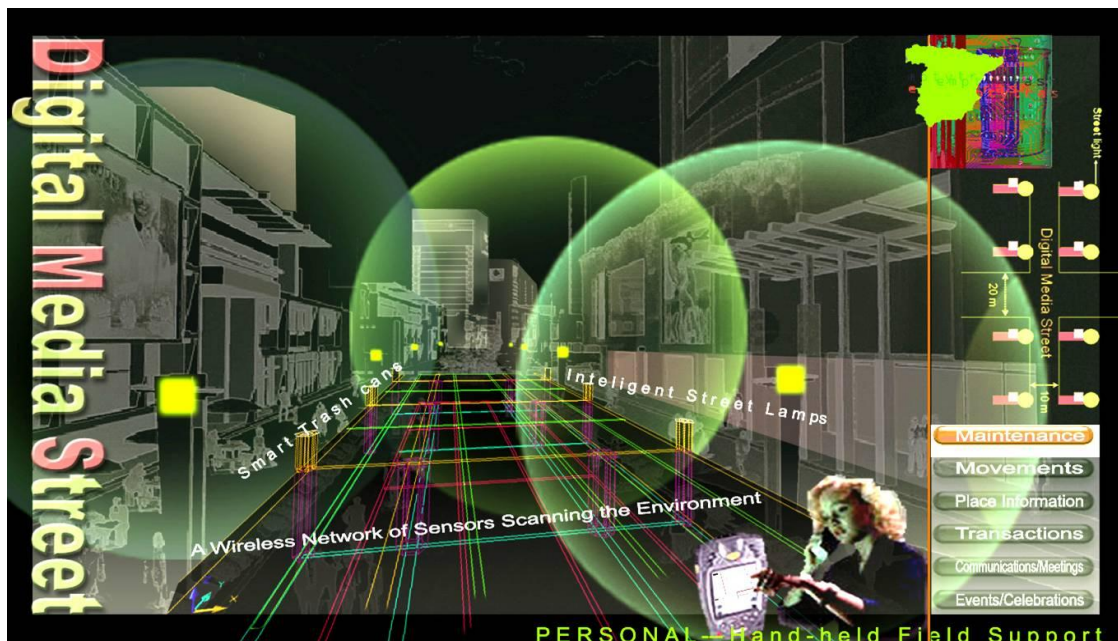
Figure 5.44: DMS wireless communications through mobile phones.[226]

Having this looked at the key 'theme cities' in South Korea, Heyri Art Village

has now become a weekend holiday destination for many Seoul citizens.

Various artworks and media productions such as movies, music

performances, painting and architecture are expected to happen in Heyri Art

Village. Its name is Heyri Art Village but in truth the produce of artworks has

disappeared, because artists do not actually live there and so cannot

produce any artwork. Instead they use the buildings as guest houses and

commercial places such as galleries, art shops, cafés and restaurants for

economic reasons. The concept of an 'innovation environment' has been

destroyed due to the lack of self-sufficient community who might create art.

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[226] Source: Michael L. Joroff, Dennis Frenchman, Thomas Campanella, Anthony Townsend, and Alexis Bennett, *Digital Media Street: The City as Product Laboratory*, (Massachusetts: Massachusetts Institute of Technology, 2002) p 27.

Heryi Art Village is thus another bad example, 'an isolated island', even though its initial plan had so openly sought arts-based approaches. They really need players such as art and design students who might live 24 hours in the town, not just weekend players who are in truth merely commercial consumers of art, not creators.

Paju Book City is an industrialised book-making complex that has been mainly focused on the publishing industries since the first phase, even though the initial construction plan for the first phase was not supposed to be so. The second phase and third phase of the Paju Book City therefore are seeking to integrate also the film industry, but in truth the buildings and places in the town are just being used as location sets for movies and television series. Thus instead of the film industry, a large outlet fashion mall was introduced and in doing so, it changed the whole Book City concept. The Paju Book City should have been developed as a truly self-sufficient town, including housing for local people who would have been potential consumers of its facilities. It too needs incubator systems to link between design students and book industry. Art and design students could well provide a greater creativity in book design as well as providing the people who will sustain the town's economy. During the weekdays, it means that Paju Book City is like a ghost-town. The place needs people such as students and local people so that the Book City becomes live.

Digital Media City broke the urban fabric in that it isolated the local

community from existing environment due to the T-bone steak shape of the DMC plan. The eastern part of the local community is blocked by infrastructural elements such as the railway line and roads which they used to use to communicate with the rest of the local community. The Digital Media City is just mainly focused on the IT media businesses within its territory, and as such does not communicate its ideas to local people. But in order to testify to the success of DMC's project, the participation of local community is actually necessary. Digital Media City is simply never going to invite in local people, nor indeed the majority of Seoul citizens, because it has not been entirely constructed according to its initial plan. And in turn, its much proclaimed Digital Media Street in fact heavily depends on existing building typologies to the extent that it becomes just an ordinary street. Without bringing local people into the Digital Media City, it is likely to become just a typical, isolated IT business cluster. With these hard critiques of the failings of the three 'theme cities' under discussion, It is now time to look much deeper into new urban possibilities that could actually contain the crucial characteristics of South Korean architecture and urbanism, and also provide lively and inclusive environments for citizens to live in. This aim forms the subject of the final chapter of this thesis, which consists of my own vision for an exemplar new urban project – a new music city in the area of the Demilitarized Zone (DMZ), close to the border with North Korea.

Chapter 6: Urban Proposal

Having looked in the previous chapter at the problems of the case studies of

new 'theme cities' offered by recent South Korean architecture and urbanism,

this final chapter will look at my proposal for a new music city in the

Demilitarized Zone (DMZ).[227] As noted before, this chapter therefore pulls

together the critiques in the preceding chapters to argue for a new kind of

architecture and urbanism in South Korea. Just as increasing economic,

business, cultural and communication exchanges are now being developed

between the two divided parts of Korea – despite the ongoing cyber-war

mentioned in Chapter 1 – so too larger architectural projects are required to

create continuous urban projects predicated on innovative socio-economic

environments. These must contain the crucial characteristics of South Korean

architecture and urbanism, which is what I will explore fully in this final section

of the chapter. Likewise, I have deliberately chosen to use a site on the

contentious DMZ band so that it can act as a bridging and stitching tool

between the divided halves of Korea in a hopeful future scene of reunification.

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[227] The Korean Demilitarized Zone (DMZ; Hangul: 한반도 비무장지대; Hanja: 韓半島非武裝地帶) is a strip of land running across the Korean Peninsula that serves as a buffer zone between North and South Korea which runs along the 38th parallel north. The DMZ cuts the Korean Peninsula roughly in half, crossing the 38th parallel on an angle, with the west end of the DMZ lying south of the parallel and the east end lying north of it. It was created as part of the Korean Armistice Agreement between North Korea, the People's Republic of China, and the United Nations Command forces in 1953. 'Korean Demilitarized Zone', http://en.wikipedia.org/wiki/Korean_Demilitarized_Zone (accessed 01 July 2013).
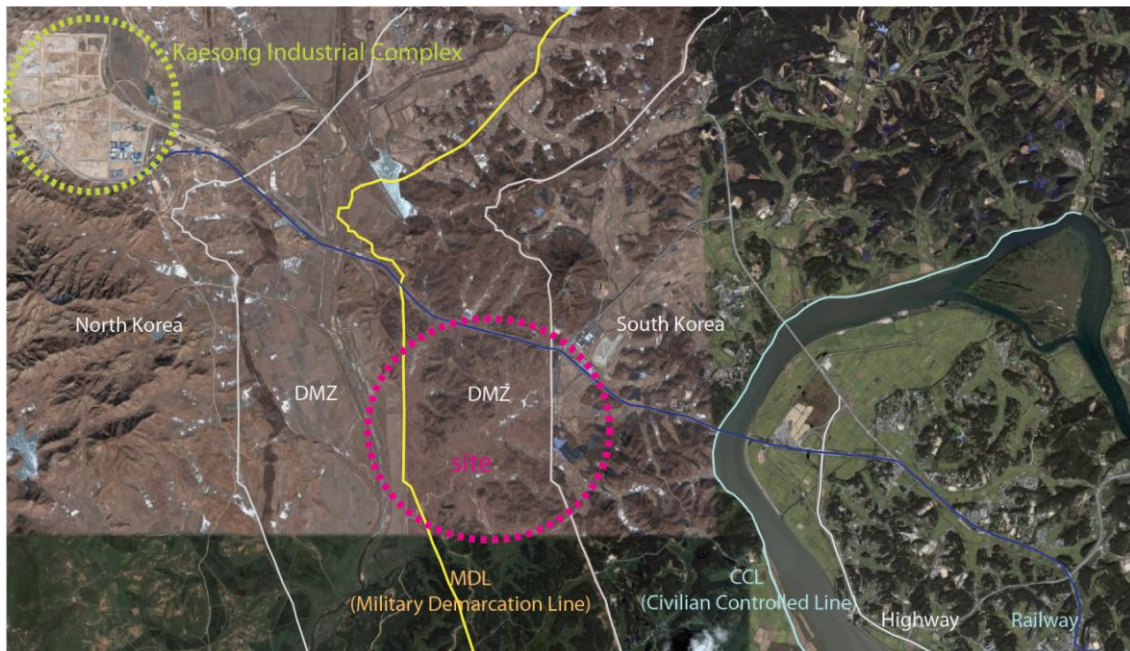
6.1 The Korean Demilitarized Zone

Figure 6.1: Demilitarized Zone (DMZ).

The DMZ is 250 kilometres (160 miles) long and approximately 4 km (2.5 mi) wide, and despite its somewhat ironic name it is in fact the most heavily militarized border in the world. The Northern Limit Line,[228] or NLL, is the *de facto* maritime boundary[229] between North and South Korea, in the Yellow Sea,[230] and as a result the coastline and islands on both sides of the NLL

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[228] The Northern Limit Line or North Limit Line (NLL) is a disputed maritime demarcation line in the Yellow (West) Sea between the Democratic People's Republic of Korea (DPRK) on the north, and the Republic of Korea (ROK) on the south. This line of military control acts as the de facto maritime boundary between North and South Korea. 'Northern Limit Line', http://en.wikipedia.org/wiki/Northern_Limit_Line (accessed 19 July 2014).

[229] A maritime boundary is a conceptual division of the Earth's water surface areas using physiographic and/or geopolitical criteria. As such, it usually includes areas of exclusive national rights over mineral and biological resources, encompassing maritime features, limits and zones.Generally, a maritime boundary is delineated through a particular measure from a jurisdiction's coastline. 'Maritime boundary', http://en.wikipedia.org/wiki/Maritime_boundary (accessed 14 August 2014).

[230] The Yellow Sea is the name given to the northern part of the East China Sea, which is a marginal sea of the Pacific Ocean. It is located between mainland China and the Korean Peninsula. 'Yellow Sea', http://en.wikipedia.org/wiki/Yellow_Sea (accessed 29 August 2014).

divide are also heavily militarized. After the traumatic Korean War in the early-1950s, the site of the DMZ border zone soon became a complete wasteland. Important geological features are that the DMZ is located near to the Hantan River and Imjin River.
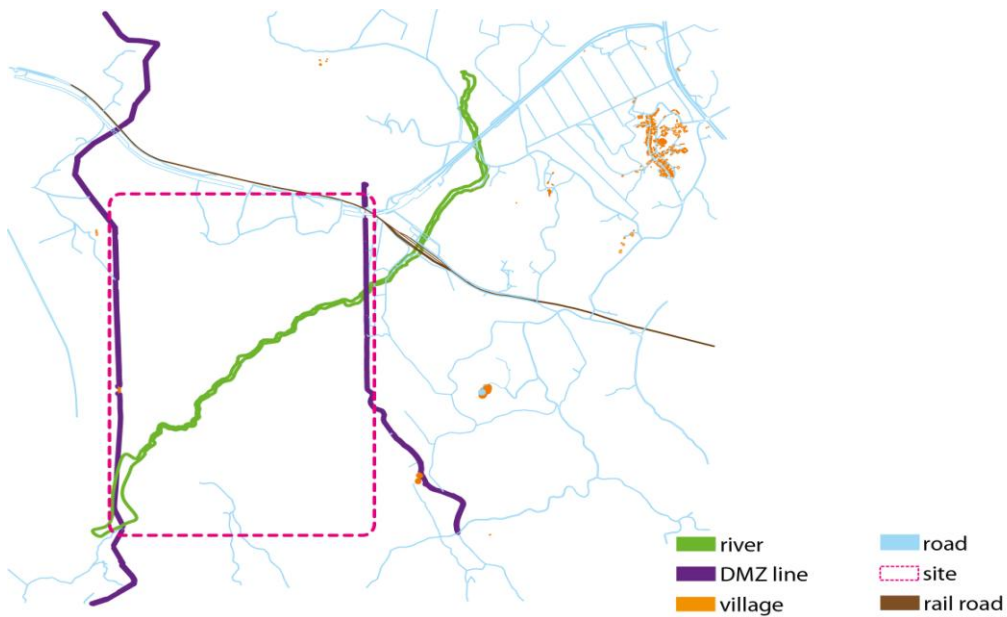

Figure 6.2: Demilitarized Zone (DMZ) and site.

6.2 Kaesong Industrial Complex

In order to conceive my project, the investigation of social data and other information about those who currently live north of the border is also essential, and for that purpose the example of the Kaesong Industrial Complex has been selected. My project can only be envisaged by thinking of the future of people in North Korea, not only those south of the border.

Figure 6.3: Kaesong Industrial Complex location.[231]

The BBC's Lucy Williamson: "North Korea and America are in a kind of 'who blinks first' game" North Korea has said it is entering a "state of war" with South Korea in the latest escalation of rhetoric against its neighbour and the US. A statement

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[231] Source: Google map.

promised "stern physical actions" against "any provocative act". North Korea has

threatened attacks almost daily since it was sanctioned for a third nuclear test. It

has technically been at war with the South since 1953 as no peace treaty has

been signed. An armistice at the end of the Korean War was never turned into a

full treaty. The jointly run Kaesong industrial complex, just north of the border, is

still in operation. However on Saturday, Pyongyang's official KCNA news agency

said it would be closed if insults to the North's "dignity" continued.[232]

North Korea's move to suspend access for South Koreans to the jointly-run

Kaesong Industrial Complex has caused much concern among observers, and

has raised tensions further in the Korean peninsula. The Kaesong Industrial

Complex is located inside North Korea, just across the Demilitarized Zone. This

project for a new industrial settlement started in 2003 and was in many ways

the last peaceful indicator between the two nations – there have only been

major war-like actions between North Korea and South Korea ever since it

launched. In order to increase economic cooperation with North Korea, the

Kaesong Industrial Complex was largely financed by South Korea. The Korea

Land Corporation and Hyundai Asan Company run it as a private venture,

although also closely involved in this sensitive initiative (of course) are both the

North Korean and South Korean governments. The initial development aim was

to manufacture goods by South Korean companies by using cheaper North

Korean labour. A total of some 53,448 North Korean employees and 786 South

Koreans were working there in December 2012, according to the Unification

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[232] 'North Korea enters 'state of war' with South', http://www.bbc.co.uk/news/world-asia-21979127 (accessed 30 March 2013).

Ministry. All the products were then taken off to be sold in South Korea. In 2011, the total sale of goods was worth $470m, and hence it was the biggest contributor to inter-Korean trade. Semi-conductors, textiles, car parts and clothing are the main industries, and a total of 123 companies are located in the Kaesong Industrial Complex.

The initial intention was to develop the Kaesong Industrial Complex to become the half the size of Manhattan Island, with residential areas and shopping areas that would anticipate also tourism. However, this larger plan was blocked by North Korea for the last time in 2009. According to South Korea's Unification Ministry, South Korean companies in the town are paying more than $80m a year in wages to the North Korean workers there. The benefits of this complex altogether contributed $2bn in trade for North Korea, according to the Reuters news agency. There are no restrictions, in that is a duty-free zone, and up till the North Korean threat, no visa was required for South Koreans to visit. It was altogether a very controversial and ambitious plan, and most people remain sceptical about its chances of success in helping to ease tensions between North Korea and South Korea – or in helping North Korea to reform its economy. The Kaesong Industrial Complex can therefore be regarded as the last remaining indicator of peaceful relations and engagement between North Korea and South Korea.[233] It is a troubled scheme, but it sets a useful example.

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[233] A South Korean naval vessel, the Cheonan, was sunk in disputed waters, killing 46 sailors. Seoul says a North Korean torpedo sank the ship, but Pyongyang denies any role in the incident. Late in 2010, North Korean artillery units fired shells onto and around Yeonpyeong Island in disputed waters. Four South Koreans were killed, including two civilians. It was the first direct artillery attack since the 1950-1953 Korean war. South Korea responded by shooting shells at North Korea.

6.3 Site Research – Analysis of the DMZ (Demilitarised Zone)

The DMZ acts as a 'free' space for me to experiment in, in my efforts to envisage a new and more cultural responsive form of Korean architecture and urbanism. What will be presented in this final section of the chapter are not to be seen so much as a master-plan or blueprint for a specific development, but rather as some concepts and initial design ideas for Korean architects and urbanists hopefully to take on and develop into new buildings and cities.
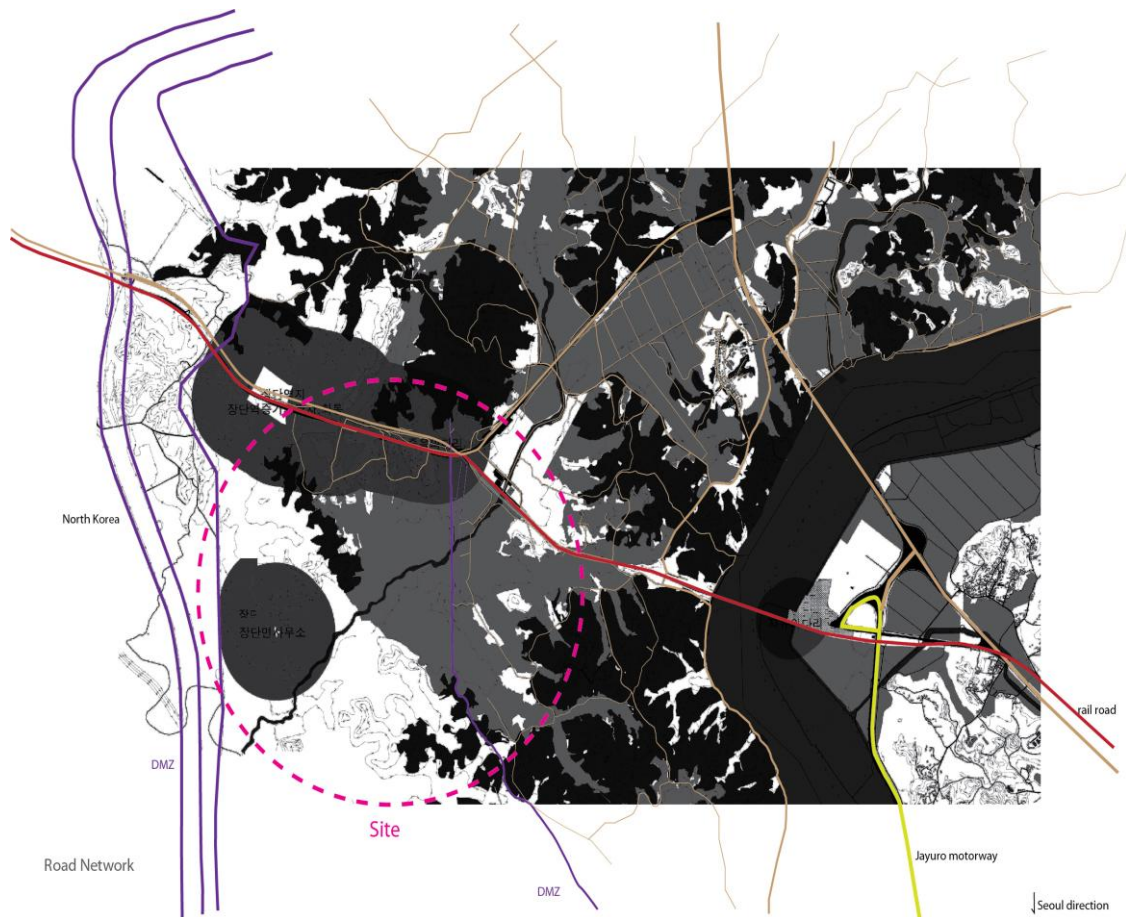

Figure 6.4: Road network.
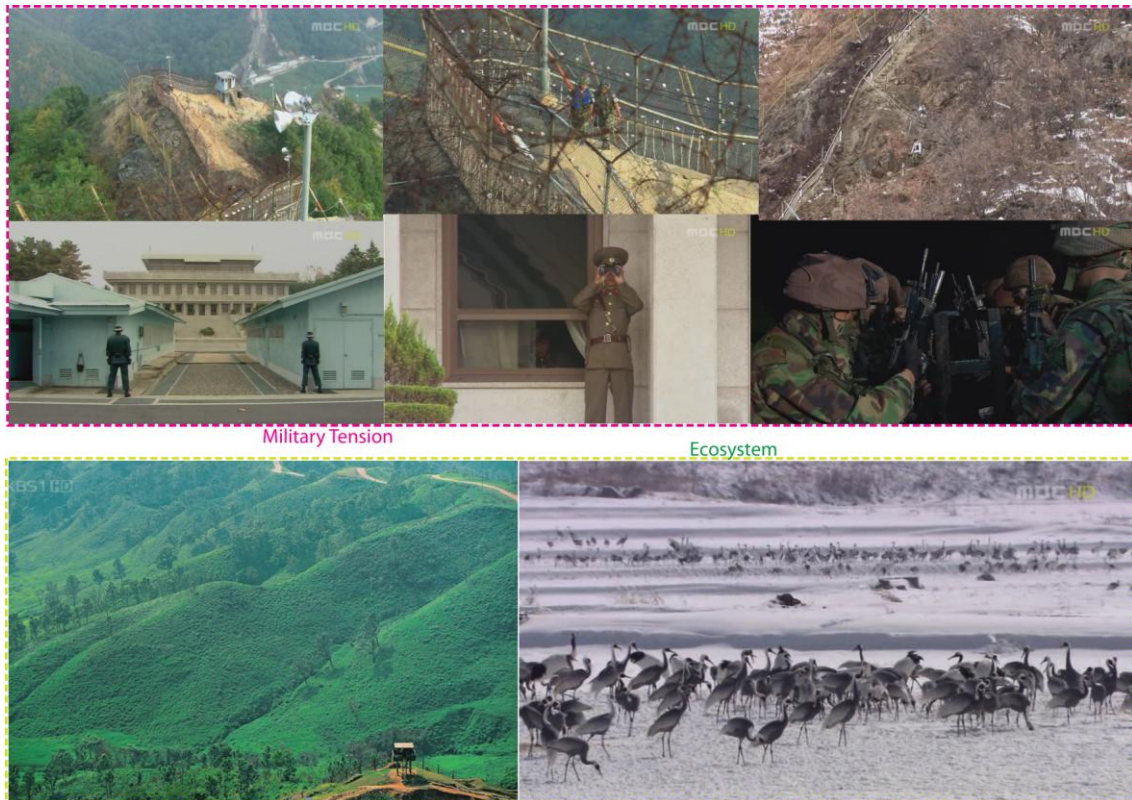
6.4 Ecosystem vs. Mine Dangers

Figure 6.5: Military tension vs. ecosystem in DMZ.

Ecosystem

"When human beings disappear from the Earth one day, how long would it take for

nature to be restored to its original state? The answer lies in the Demilitarized Zone

in Korea," says Alan Weisman.[234] Weisman calls the DMZ a modern version of

Noah's Ark. "When humans give nature a chance, nature will recover at a

remarkable speed, and the DMZ is the very evidence that supports this," he

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[234] A professor emeritus of the University of Arizona and prominent environmentalist.

says.[235]

The South Korean government has come up with a plan to make the DMZ into
an ecological park (2,979 sq. km area).[236] This is part of the government's effort
to transform the DMZ into world natural heritage site, approved by UNESCO, as
well as anticipating economic benefits from it being turned into a desirable
tourist area popular among foreigners. Again, there seems something comical
in this ambition. But there are also curious factors in its favour. One is that the
natural ecosystem in the DMZ has now finally and perfectly recovered itself
from the Korean War over a period of 60 years, and so now nature is preserved
extremely well due to the almost complete absence of human touch. Today
there are 2,716 species of fauna and flora, including many endangered animals.
The DMZ is thus, paradoxically, an ecological heaven and a ready-made nature
reserve.

> In their absence, the netherworld between these enemy doppelgangers has filled
>
> with creatures that had practically nowhere else to go. One of the world's most
>
> dangerous places became one of its most important – refuges for wildlife that might
>
> otherwise have disappeared. Asiatic black bears, Eurasian lynx, musk deer,
>
> Chinese water deer, yellow-throated marten, an endangered mountain goat known
>
> as the goral, and the nearly vanished Amur leopard cling here to what may only be

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[235] 'Environmentalist Who Fell in Love with the DMZ',
http://english.chosun.com/site/data/html_dir/2008/10/24/2008102461007.html (accessed 11
August 2011).
[236] The reserve would consist of 1,078 sq. km including the city of Paju (426 sq. km) and
Yeoncheon-gun (652 sq. km) in Gyeonggi Province and a 1,901 sq. km area including
Cheorwon, Hwacheon, Yanggu, Inje, and Goseong in Gangwon Province.

temporary life support – a slender fraction of the necessary range for a genetically

healthy population of their kind. If everything north and south of Korea's DMZ were

suddenly to become a world without humans as well, they might have a chance to

spread, multiply, reclaim their former realm, and flourish.[237]

The ecosystem in the DMZ also demonstrates just how nature conservation and

biodiversity are very important values for human beings inherently. The DMZ

contains a staggering 67% of South Korea's natural ecosystem. It provides

protection for migratory birds – such as red-crowned cranes, white-naped

cranes, and black faced spoonbills – in their flights between China, Russia,

Philippines, and Taiwan. The eastern side of the DMZ contains the more

mountainous area, in which there are plentiful mixed-species forests which form

the habits for species such as goral, Eurasian lynx, leopard and elephant seal in

its coastal areas.

Mine Dangers

Former U.S. President Bill Clinton described it as "the scariest place on Earth." The

Demilitarized Zone (DMZ) that divides the two Koreas is the most heavily fortified

border in the world, bristling with watchtowers, razor wire, landmines, tank-traps

and heavy weaponry. On either side of its 151-mile (248 km) length almost two

million troops face each other off ready to go to war at a moment's notice.[238]

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[237] Alan Weisman, *The World Without Us* (London: Virgin Books, 2008) p185.
[238] 'Korea's DMZ: 'Scariest place on Earth'',
http://edition.cnn.com/2002/WORLD/asiapcf/east/02/19/koreas.dmz/ (accessed 18 June 2013).

Figure 6.6: Mine accident local patients in DMZ.[239]

	2008	2007	2006
Area (m^2)	104,000	169,000	229,000
Mines cleared	1,470	2,300	7,800

Figure 6.7: Mine clearance in South Korea.[240]

In complete contrast to the ecological paradise, and indeed one of the causes of

that very condition, is that the current proliferation of minefields in the DMZ is

totally out of control. The number of known minefields is over 1,100 sites,

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[239] Images source: http://www.greenkorea.org/?p=1709.
[240] Responses to Landmine Monitor questionnaire by the Permanent Mission of the ROK to the UN in New York, 16 April 2007, 16 June 2008, and 9 June 2009.

covering some 20,000,000m², while the area of unreported minefields has 209

sites that cover a staggering 97,820,000m². It is also the case that the South

Korean army's capacity to remove these mines is very low. Every year just four

battalions of the military engineers remove less than 20,000m² of mines, and

the amount of money spent on the removal of mines is only equivalent to

about ₤ 240,000. Hence the current rate of mine removal means it will take 490

years to eliminate all of unreported minefields. Not surprisingly, the number of

mine casualties and injuries amongst South Korean soldiers (and a few local

residents) is shrouded also in mystery. At least 500 civilians, who were injured

by mines but survived, were mentioned as the report of the Korea Research

Institute for Mine Clearance stated in March 2009. However, the Korean

Campaign to Ban Landmines (KCBL) has stated that there were at least 2,000-

3,000 military casualties and at least 1,000 civilian casualties in their media

reports.[241]

6.5 A New Themed Music City

The different social groups that I am proposing that will interact in my new

music city in the DMZ are essential for the project. For example, there are to be

music students, tutors, professional musicians, local farmers, urban workers, as

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[241] Landmine Monitor identified 63 mine casualties between 1999 and 2008 (six killed and 57 injured). At least 20 casualties were military personnel, including one American soldier injured in 2001. Figures are likely incomplete as there is no comprehensive official data on mine casualties in South Korea. The Ministry of National Defense only records military mine/ERW incidents. Civilian casualties are identified mainly through the media. 'Republic of Korea: Ten year summary', http://www.the-monitor.org/index.php/publications/display?act=submit&pgs_year=2009&pgs_type=lm&pgs_report=south_korea (accessed 14 March 2010).

well as North Korean visitors and participants. The project can thus be seen as acting as a 'social condenser' to introduce North Koreans to how they can participate in the capitalist world, with the expectation of implanting capitalism in North Korea in due course. In other words, my project aims to come across as collaborative with North Korea and not just ignore the people who are living over the border. The one-time position and role of West Berlin as a showcase for capitalism, set firmly within East Germany during the 'Cold War' era in Europe, and its advertising and educational role, are considered in this project as a historical parallel. My project aims to attempt to end things like the ongoing cyber-war by offering free access to North Koreans of shared music. Furthermore, the slowly developing ecosystem stimulated by the DMZ, and the relative lack of human development during the past few decades through non-use, are leading to increased biodiversity. How then might the new city fit into the local ecosystem, and be used positively to prevent damage to the ecosystem? The new music city project addresses this issue by incorporating widespread ginseng production in the location, and by the general landscaping treatment for the city.

The design element in this section is intended to confirm the possibility that experimentation in architectural production – as based on culturally-based and arts-based approaches – can be used to generate new values, patterns, forms and tools of communication. Furthermore, out of these investigations a range of new propositions is made to explore the complex social and cultural issues involved, focussing – as noted – on the highly complex terrain of the

demilitarized border zone. Hence the project, which will be for a new version of the Korean 'theme city', will be vitally important in regard to cross-cultural architectural activities between North and South Korea, and in the wider sense between the whole of Korea and western nations.
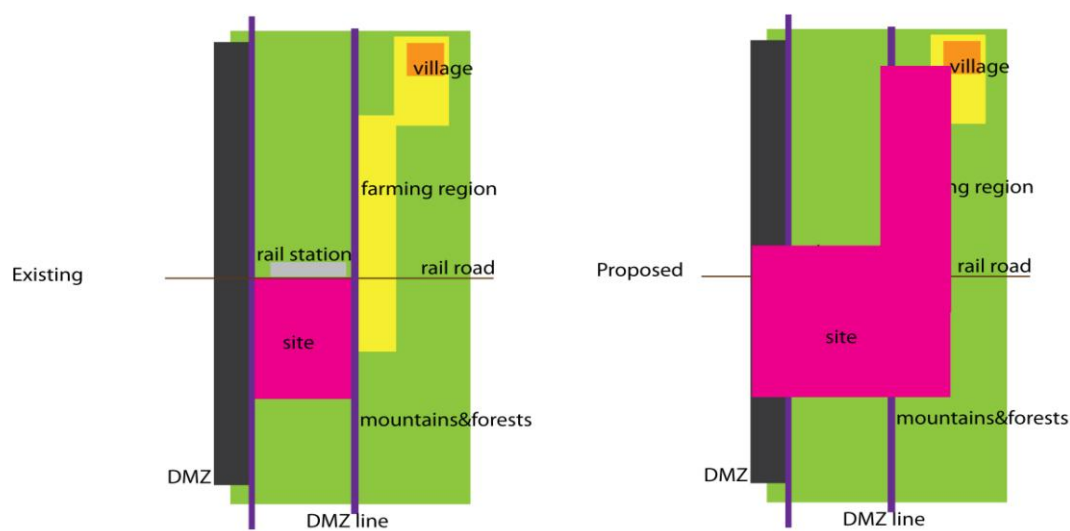

Figure 6.8: Existing condition and proposed ideas diagram.

In order to conduct a new model of urbanism for this future project, some initial ideas can be set out:

1. Minesweeping and new kinds of minesweepers – i.e. local people, students and soldiers. Because of the huge problem of mines in the DMZ, it is clear that local citizens and soldiers are suffering badly from mine accidents every year. Hence the act of minesweeping needs to be the first principle of any urban

strategy in the DMZ, and so a policy has to be put in place to clear the area of
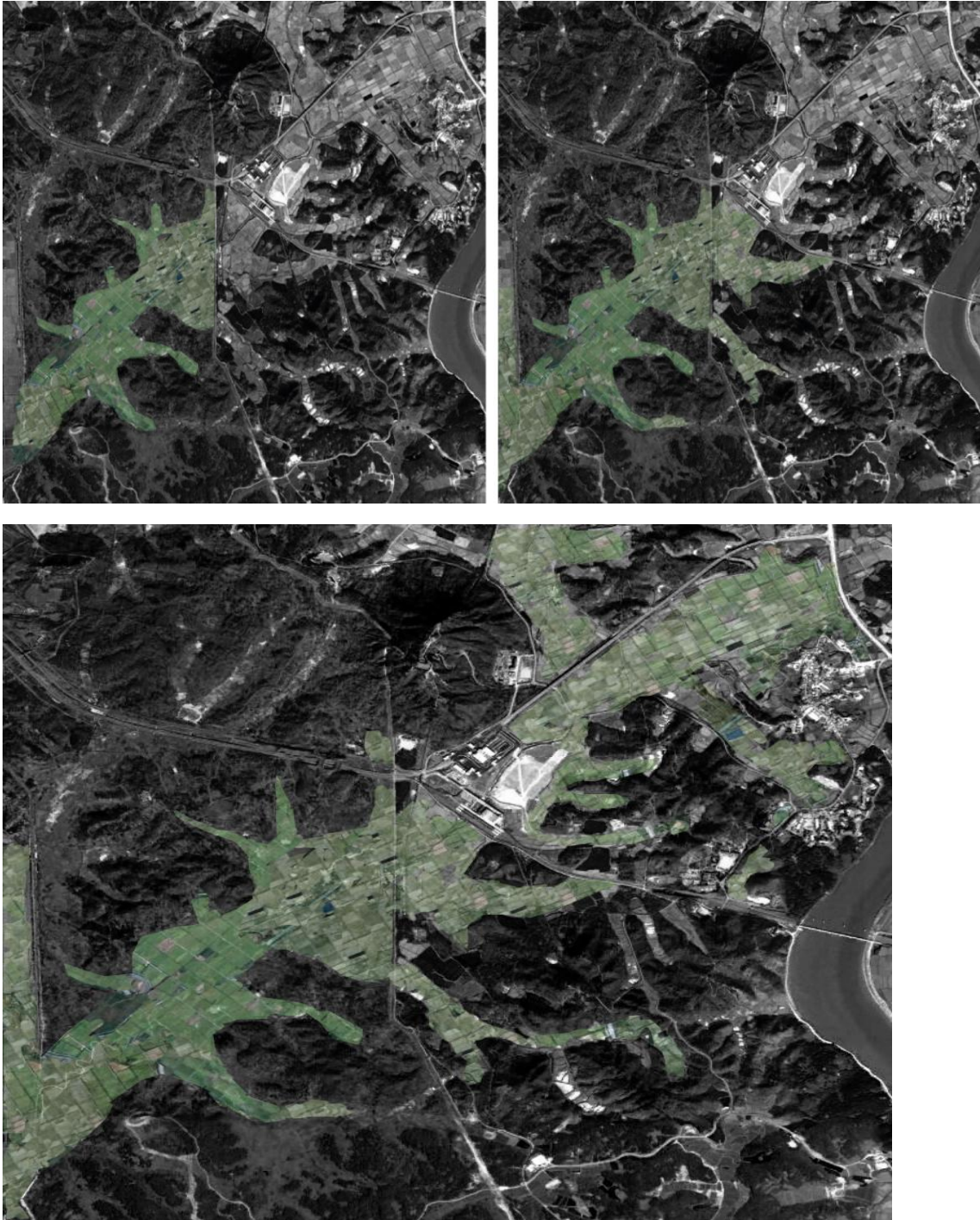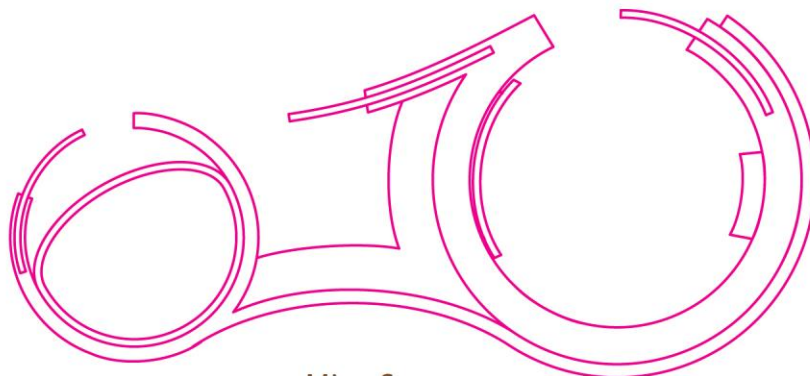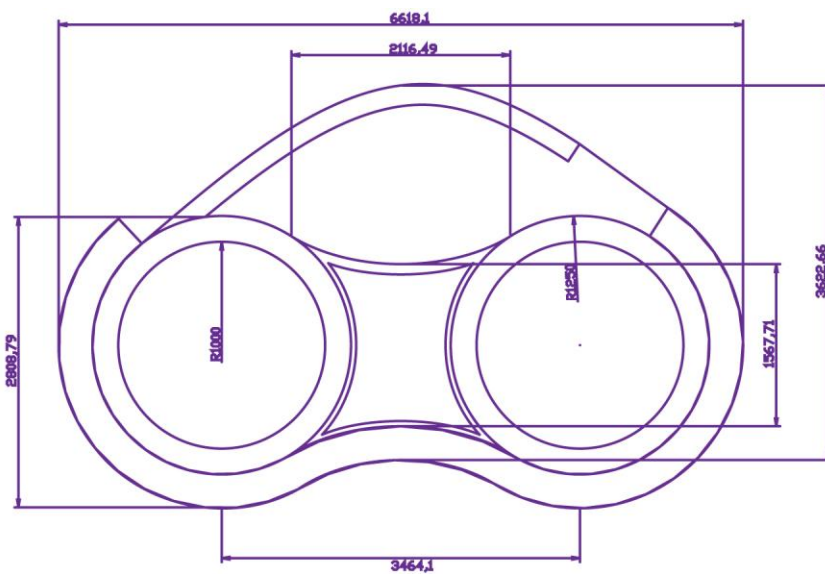
its mine dangers.

Figure 6.9: Existing condition and proposed ideas.

In order to enact my urban proposal it will thus be necessary to secure the area. Furthermore, to do so it is essential to create new, more effective minesweeping machines for the topography of the land – this is because the current minesweepers used by the South Korean Army are not fully effective on DMZ terrain due to their narrow surface shapes and the problems created by the topography of the large mountains. Hence my new design for a special DMZ minesweeper will help to clear minefields even in these difficult and hilly areas.
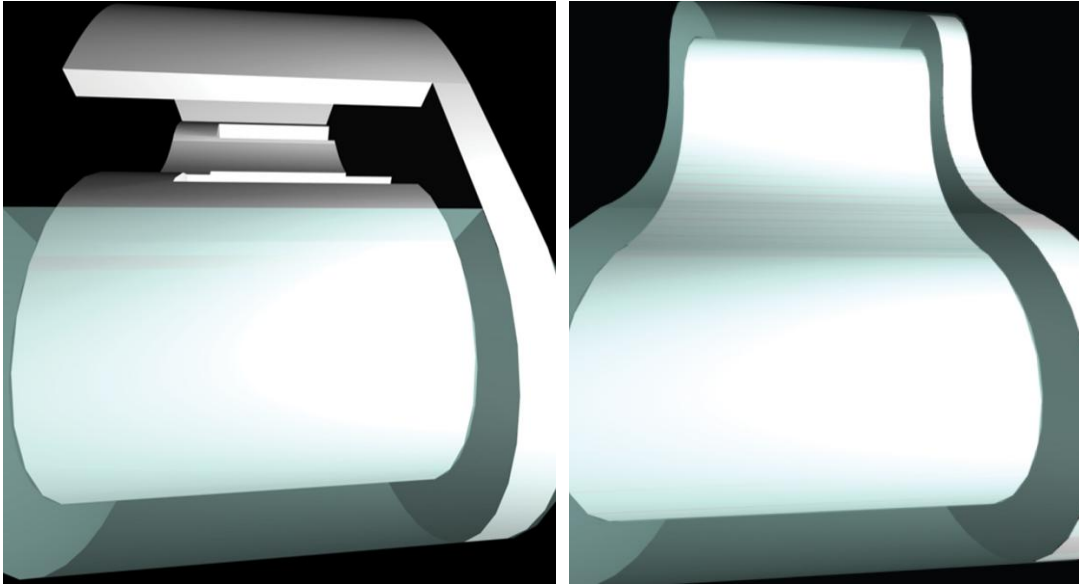

Mine Sweeper

Figure 6.10: New Minesweeper design. Side and front view.

2. Secure the area – visual mapping, to put up mine danger notice, flood preparation.

After the minesweeping has been carried out, and in order to secure the area even more, a system of visual mapping and warning notices will be needed. The placement of notices about the dangers from mines is something that has been neglected for years in the DMZ area, or else the colours and texts on the notices that do exist have faded to such an extent that it is extremely hard to recognize them (even if local people do know where the worst sites are). Furthermore, the actual locations of notices have often been changed due to factors such as flood damage, and so even the notices which are there might well be in the wrong place, rendering them useless. Hence a fulsome programme to locate and sign every mine, and every minefield area, is an essential second step in my urban design process.
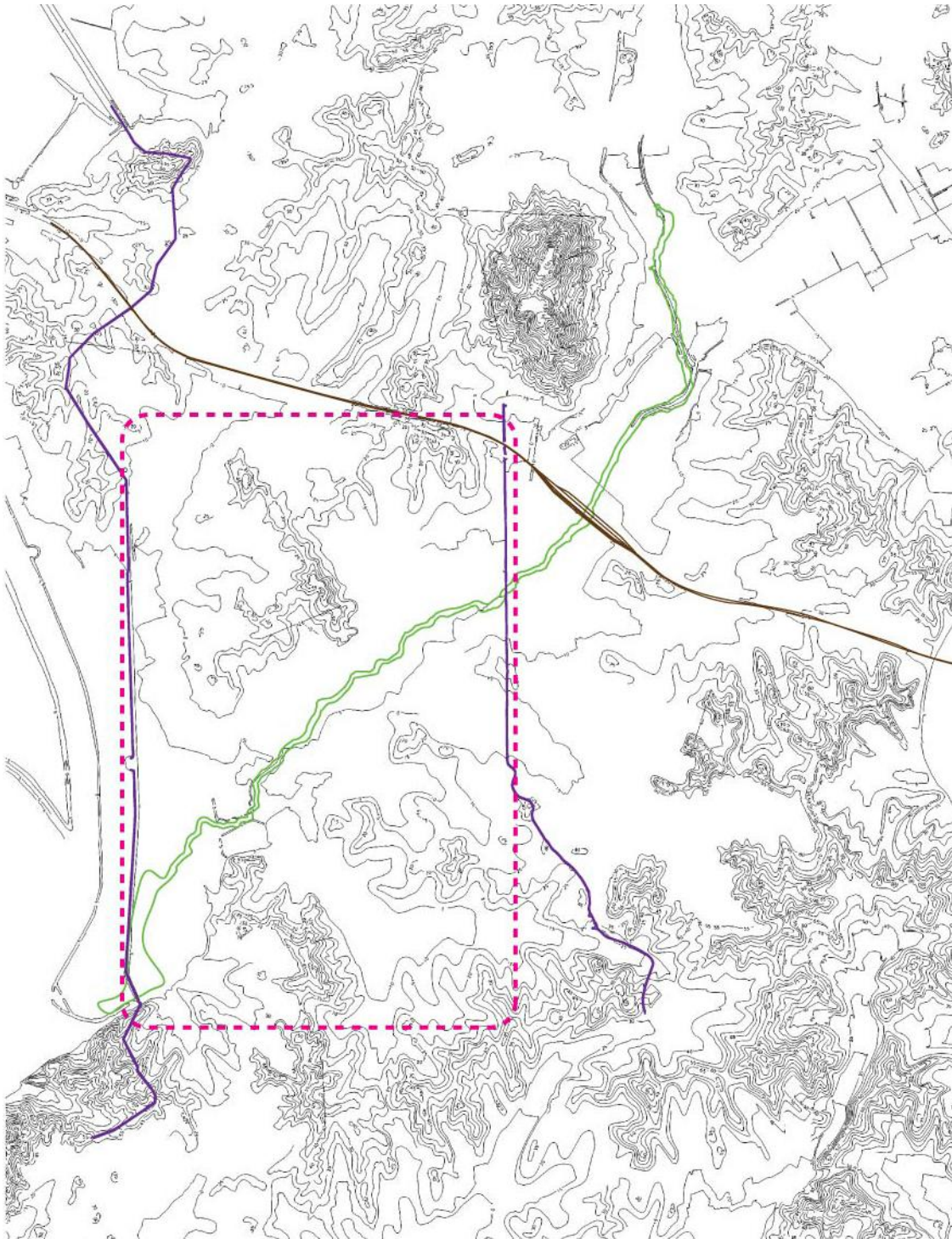
Figure 6.11: Minesweeping location.
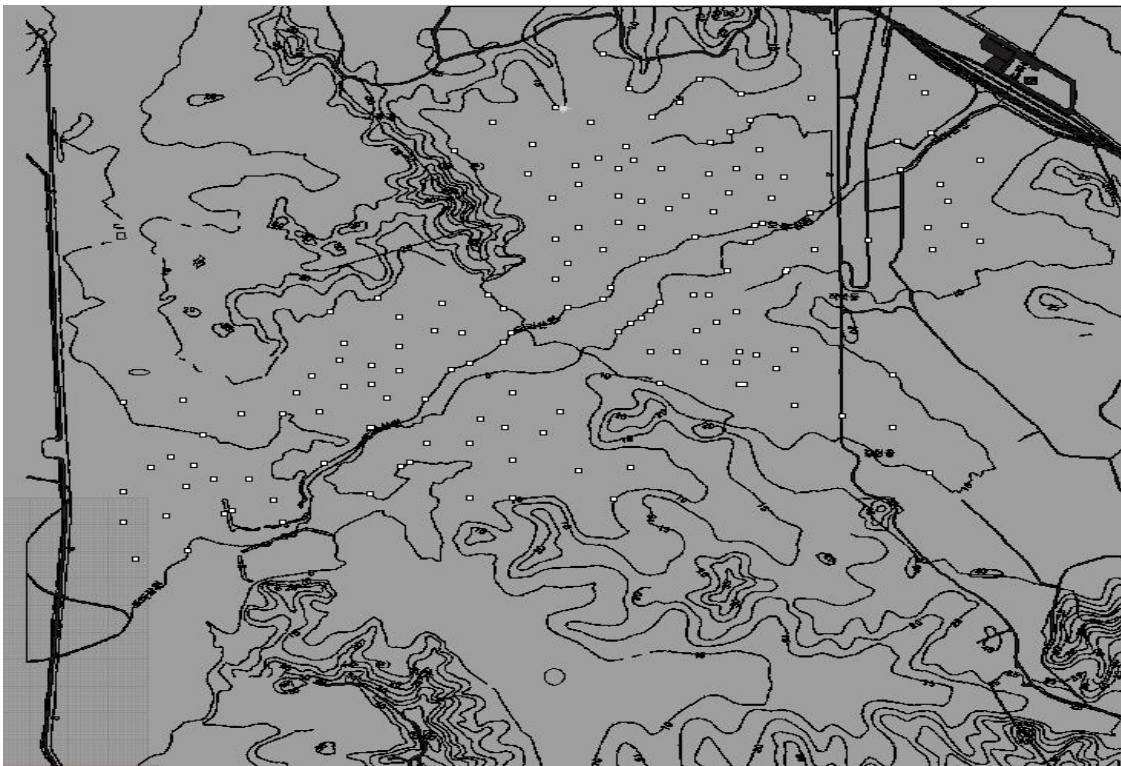
Figure 6.12: Current neglected notice of minefield.[242]

Figure 6.13: Minesweeping.

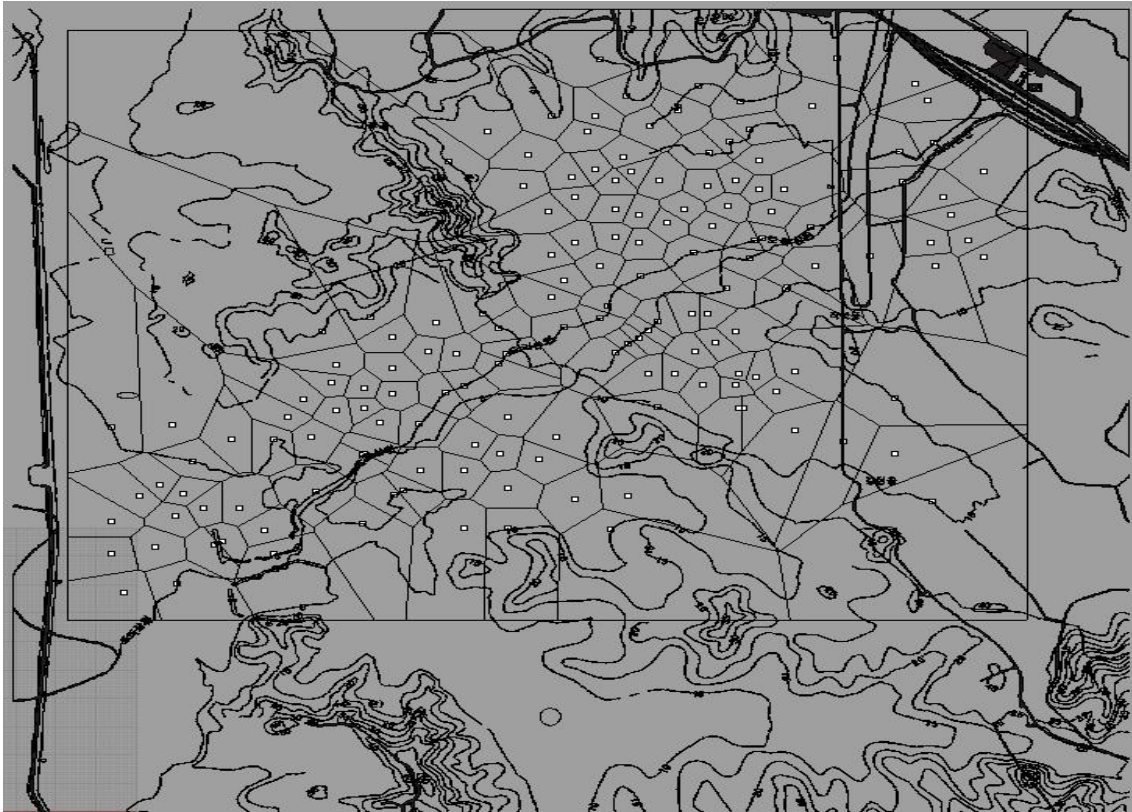[242] Image source: http://www.greenkorea.org/?p=1709.

Figure 6.14: Creating lines and zones.
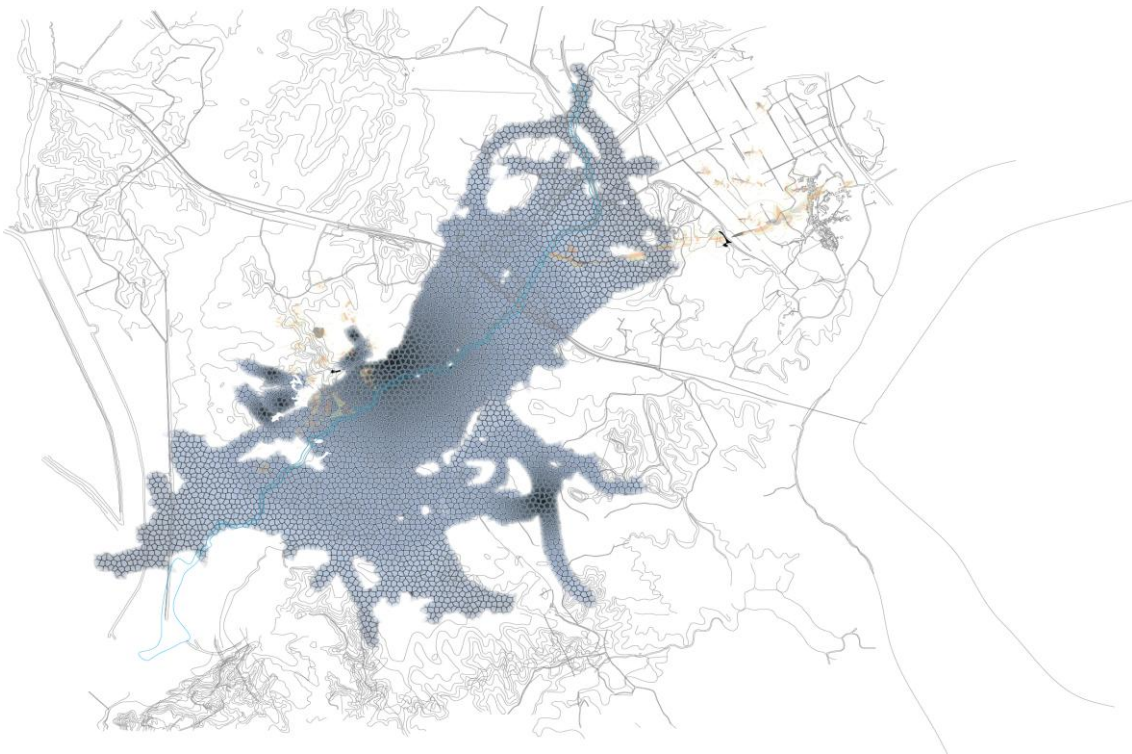
Figure 6.15: Visual mapping – indicating minefields.

Figure 6.16: Visual mapping – proposed notices (vivid, different colours).

3. Support for local agricultural cooperation. – Ginseng cultivation (local people,

students).

Although the proposed 'theme city' is to be based around popular music,

residents will also be expected to pursue joint agricultural projects along with

local cooperative farms in Buphung-ri, the most notable regional centre in the

DMZ, and which is situated relatively near to the selected site. This part of the

project focuses on cultivating ginseng, which is indigenous to the soil of this

area. Ginseng has been harvested across the region for many hundreds of

years. Ginseng production has many other benefits. Ginseng plants can

improve the environment after removing the mines as they provide a good

source of bio-remediation of the soil and its nutrients.

Figure 6.17: Proposed ginseng field.

Ginseng production can also slow down the potential danger of future pollution happening in the region. And it will provide economic benefits for local farmers and for those living in the future music city due to increased social cooperation. Wild ginseng supplies in the surrounding forests can also be added into the equation, and this version of the crop grows extensively because of local geomorphologic factors.

They have entered a strip of land five kilometres deep that lies just below South

Korea's northern limit, called the Civilian Control Zone. Nearly no one has lived in

the CCZ for half a century, although farmers have been permitted to grow rice and

ginseng here. Five more kilometres of dirt road, flanked by barbed wire filled with

perching turtle doves and hung with red triangles warning of more minefields, and

they reach a sign in Korean and English that says they are entering the

Demilitarized zone.[243]

4. Music environment – music school (students), 24-hour city, Music spaces –
hall, dance club, classic, performance spaces, etc.

Figure 6.18: Proposed music environment area.

The new 'themed city' is to be designed around a network of music schools

[243] Alan Weisman, *The World Without Us* (London: Virgin Books, 2008) p184.

which provide students with a lively, creative musical environment. Students who live in the city will be expected to create and record and sell their own music, as well as stimulating local economic value through their work in cooperation with local farms in the cultivation of ginseng plants. The music students in this way can achieve a self-sufficient life. And it is necessary for there to embrace a spirit of diversity, with help being given to ensure the city includes numerous kinds of music including independent bands, dance, classical, hard rock, and pop.

Figure 6.19: Proposed music environment area and ginseng field.

The themed music city will also contain a whole range of specially designed

buildings and spaces, all at very different sizes, which will provide event spaces in the form of concert halls, dance clubs, open music spaces for visiting musicians, recording spaces, and such like. It also provide incubation spaces in which music students, various musicians, and producers can come together and communicate with each other, and as a result create various, new, experimental productions.

Finally, to achieve this level of intensity and interactivity and creativity, the new kind of architecture and urbanism envisaged for this new themed music city needs to be based on the key cultural factors identified in previous chapters:

1. Hyper-digitisation
2. Crowd-driven popular culture such as in pop music
3. Highly differentiated and collectivised 'bang' culture in which different social groups can mix together

In this sense my proposal for a musical 'theme city' in the DMZ zone brings together all the analysis in this thesis about cultural conditions, the best examples of urban initiatives in South Korea, and the urgent need to start thinking in advance about urban policies which can be applied when the country is reunified in future.

Furthermore, my project could thus be seen as creating a new kind of shared urban space in which North Koreans can start to understand life in the capitalist

south, in terms of form of controlled importation of cultural idea. It thus can be

explained as part of the necessary cross-border cultural transfers, and the act of

getting to know each other, which will be required in future once reunification

begins to happen. My intention is either to mediate or change the problematic

North Korea and South Korea dynamics that currently exist. With all this in mind,

it is now time to draw all these strands together into the Conclusion for this

thesis.

Conclusion

Having looked at the effects on architecture and urbanism in South Korea as the result of increased cultural exchanges created by globalisation, and especially in analysing the cross-cultural architectural activities between western nations and South Korea, there are a number of conclusions which can be drawn from this study. My research has sought above all to introduce a new framework of values and perspectives about the subject of cultural transfer, revealing the sorts of characteristics which arise out of the hybridisation of binary elements. This doctoral thesis has thus examined and presented the issue of cultural transfer within the context of modern architecture and urbanism in South Korea, revealing some fascinating results which have been presented and discussed here in an entirely innovative manner.

For example, it has shown that Korean architecture has in fact gone through four phases in the adoption of modernism over the past 60 years. Modernism was first really adopted after the Second World War, and was the dominant force in the design and production of buildings and urban development after the Korean War an up until the end of the1970s. Since the 1980s, there was a conflict of approach within architecture in South Korea due to the impact of western concepts of Post-modernism and Deconstructivism. Since the 2000s, what is widely known as Landscape Urbanism has become the trend in South Korean architecture and urbanism, creating a different value system once again. Meanwhile, cities have been developed at an astonishing rate. More than 12

million units of housing have been constructed in the past three decades in

South Korea.[244] The capital city of Seoul has expanded from 300,000

inhabitants to over 10 million. In terms of the culture of contemporary South

Korea, new forms of architecture operate in many important ways. After all,

most buildings are younger than the people who live in them. Seoul in particular

is a city that has witnessed its previous layers being all but erased through

explosive growth and development. By studying this urban impact of new digital

technologies, globalisation, socio-economic change – topics which are well

developed in other academic disciplines, but not so in relation to architecture

and urbanism – the originality of my study is thus to focus clearly on such

factors to prompt a fuller response from architects and urbanists in South Korea

to the rapid urbanization which has emerged, rather than just focussing their

attention on their work on specific individual projects, which has been the usual

response up till now.

What this thesis has also argued strongly is that the emergence of any new

Korean architecture and urbanism cannot be simply categorized according to

the terms which are familiar in predominant western architectural theories and

practices. My study has presented instead a critical method which is better able

to respond to the complex issues resulting from the transfer of cultural aspects,

in regard not only to socio-political issues but also to those of linguistic and

cultural diversity. During the recent era of globalisation, Korean architecture has

become ever more deeply engaged with western culture, although often the

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[244] Jin-hee Park and Hong John, Convergent Flux: Contemporary architecture and urbanism in Korea (Basel: Birkhauser, 2012) p 25.

latter has not been understood to any real extent; instead there has been a continuous misinterpretation of western theories and, as a result, the misuse of its architectural practices. This is perhaps not surprising given that it is so tempting for those in South Korea simply to join in this current globalising trend without thinking. The young architectural researcher, Kim Jeong-hye, is an example of one figure who has been examining parameters for sustainable urbanism – particularly in the context of post-colonial developing countries – and her fascinating work provides a useful example of a new type of writing about urbanism in South Korea, hopefully in an alliance with my own work. In this case, and just as I am in this thesis, she is very critical of the Zaha Hadid project for Seoul. Her texts argue that a new approach should be based on architects and urban designers accepting the social responsibility for design, and this cannot be mixed up with the idea of design as a means for simply creating economic prosperity under the misguided notion of design being a magic solution to such problems. She points out that Dongdaemun Design Park (DDP) would be better shifted from the promotion of cutting-edge designs to social programmes that would be more engaged with local citizens.[245] All this supports the argument which I make in this thesis, which is that the new technologies, global markets and strategies of globalisation are all undoubtedly fundamental to understanding the unprecedented growth of cities in Asia in general and those in South Korea in particular, but that is not enough to deal with the situation. This is because, on the other hand, specific forms of

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[245] Jeong-hye Kim, 'Towards a design-City (Post-Design-Capital)', http://failedarchitecture.com/2013/05/towards-a-design-city-post-design-capital/ (accessed 28 May 2013).

urbanism and architectural design need to be devised and adopted as a response to these globalising conditions, and this indeed is a condition which needs to be examined and pushed further by Korean architects and urbanists.

This doctoral study has thus attempted to sketch out the response of architects to the rapid urbanization based on the new information society. By doing so, one is then able to grasp the shift in the urban transformation in South Korea in relation to architecture and urbanism, but in a profoundly Korean way. As was shown in Chapter One, South Korea is the most highly digitised information society in the world. By understanding this new information society in South Korea, we can see how digitalisation has become all-pervasive in architecture and urbanism, as indeed in all areas of its cultural life. However, the weak point of becoming such a highly digitised society is that it is now exposed to cyber attack including those across its Demilitarized Zone on the war. Full-scale 'cyber war' is happening now between South Korea and North Korea as a result of the former being online so much and so often. Chapter Two then examined the way in which the Korean music industry has become such a big part of the highly digitised nature of South Korea, and also one of the country's major engines. The music industry creates many consumers and new creators as leader of pop culture across the world, by consuming entertainment in the general flow of data and information. By realising how crowd-driven popular culture in pop music has taken on a special position as a key player in cultural life, we can appreciate more clearly the potential influence of music culture on Korean society. Indeed, the argument made through this chapter is that one

absolutely needs to understand such conditions if one wishes to have any hope of rethinking Korean architecture and urbanism. Chapter Three looked at South Korea's 'bang' culture, in which repeated clusters of small, internalized cellular rooms in tower blocks are used for specific leisure activities shared by many people who are otherwise strangers to each other. 'Bang' culture is hence a spatial urban condition which is continuously collectivised and highly differentiated in many complex ways, to an extent that those living in cities like London simply cannot perceive. 'Bang' culture hence cannot be simply categorized according to the terms in predominant western architectural theories and practices and is as effectively the spatial 'key' to understanding Korean architecture and urbanism as a collectivized experience. As a consequence, architects and urbanists need to find ways to build on the strength and uniqueness of 'bang' culture for them to be able to effect any successful architectural and urban changes in South Korea.

Chapter Four has examined how Landscape Urbanism became such a dominant movement in South Korea since 2000, in a situation where cultural acceptance and resistance operated within the different cultural context of South Korea, which transformed it according to the different architectural theories which prevail. However, by studying the effective misuse of Landscape Urbanism as taken from western architectural theory, what this shows above all is that any imposed solution like Landscape Urbanism simply cannot work within the realities of South Korea if it does not take into account Korean cultural conditions, which as shown in the previous chapters are more to do with the

hyper-digitisation of people's lives, crowd-driven popular entertainment, and 'bang' culture. A better and fresher way of approach is therefore needed to fit into everyday life as well as to architecture and urbanism in Korea. Chapter Five investigated instead some of the newer types of urbanism and architecture in South Korea by examining case studies of 'theme cities' which have been designed around reactions to rapid urbanization and the new information society. These 'theme cities' are based on innovative knowledge-based clusters, as triggered by prowess in new media, and seek to mix 'landscape urbanism' with cultural and economic production. The chapter also showed some representative recent Korean architectural projects, from small-scale building projects through to large-scale urban quarters, all of them involving issues of local identity, personal values and cultural transfer. Chapter Six has suggested, from out of these investigations, an innovative outline proposal for a new theme city – one based on the creation and recording and promotion of popular music – in order to explore the complex social and cultural issues involved. Hence it is located within the highly complex terrain of the demilitarized border zone. It is, however, hoped that the ideas suggested in my outline proposal for a new themed city can help to push architects and urbanists in South Korea to develop their own innovative ways of thinking about how to design future interventions,

This PhD study has sought above all to suggest a new methodology of Korean architectural production that can carry significance both as an experimental approach in general, and also one that might be able to be used to guide future developments following the (hopeful) reunification between South and North

Korea. A crucial argument in my research is that just as increasing economic, business, cultural and communication exchanges are now being developed between the two divided parts of Korea – despite the ongoing cyber-war mentioned before – so too it is the case that large-scale architectural projects are required to create continuous urban projects which are predicated on innovative 'themed' socio-economic environments. The proposal is intended to confirm the possibility that experimentation in architectural production – as based on culturally-based and arts-based approaches containing the crucial characteristic of South Korean architecture and urbanism – can be used to generate new values, patterns, forms and tools of communication. This is why it is so important that my proposal outlines also, even if not in any great detail, a new kind of urbanism which could be applied to this potential city, themed around the creation and consumption of popular music city, and explicitly based on the principles of hyper-digitisation, crowd-driven popular culture, and a highly differentiated and collectivised 'bang' culture that enables different social groups to mix together. My project indicated in this thesis is hence not intended so much as a blueprint, or a master-plan, but rather as a means to set out some initial ideas and concepts for Korean urbanists and architects hopefully to take on and develop through their designs for buildings and cities.

Therefore my thesis comes to an end with these speculations upon these new possibilities for architecture and urbanism in what will (hopefully) be a future unified Korea, and I believe that I have indicated here the kinds of future projects that, for architects and researchers, we need to continue to undertake

in order to push on with the culturally-driven approach I am arguing for in this doctoral thesis. This would also, I hope, serve to resist the lazy importation of western, and indeed largely American, ideas into South Korea. What my study shows is that there are a far richer sources to explore within the urgencies and vibrancies of life already present in Korean cities, and hence this is really where the creative investigations and speculations of architects and urbanists ought to be taking place. Above all, I want to use my PhD thesis to as a rallying cry for creative possibilities for a culturally influenced urbanism, and this is why I have outlined, in an open and hopefully non-dogmatic manner, a new model of Korean urbanism for the future.

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