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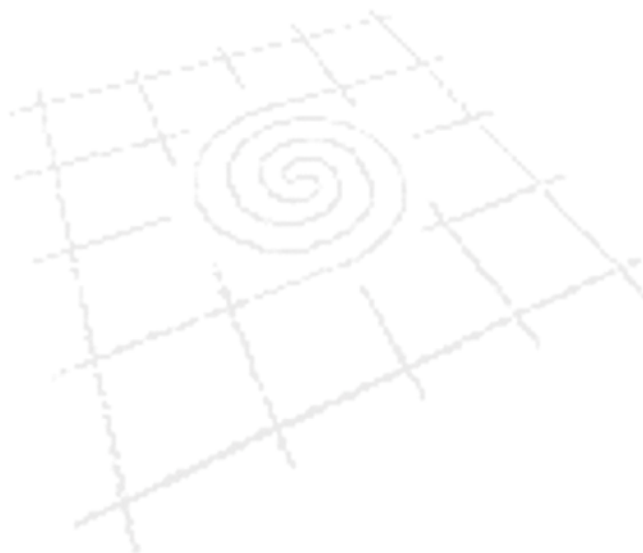
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The Suburban Front Garden: A spatial entity determined by social and natural processes

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ABSTRACT

In this article, we argue that the physical structure of the front garden and its ecosystem is determined by an ensemble of diverse social and natural processes. The essential social form is that of visuality,- an abstract compositional force which provides conventions for assessing objects but also for reshaping their surface countenance and establishing their location within the garden. Accordingly, the social processes of visuality are materially realised in the labour processes of gardening, while their consumption is mediated through the concrete process of gazing. The identified social processes include the prospect, aesthetic and panoptic dimensions of visuality. Labour conceives and creates them, while the physical structures and the natural processes reproduce and maintain them beyond the production time attributed to gardening. But they are increasingly undermined by the natural tendency of the plant ecosystem to grow. Consequently, the essential contradiction of the front garden is how the laws and tendencies of the plant ecosystem act as a countertendency to the social forms of visuality. This paper shows that beneath the surface appearance, there exists complex relationships between nature and society in this space we call the suburban front garden.

KEY WORDS: society-nature relationships, space, visuality, gardening, labour processes.

Introduction

In the social sciences in general and in sociology in particular, gardening and gardens have been a neglected area of research. What does exist is rather eclectic and diverse body of specialized knowledge. Our major criticism of the sociology of the garden is that it has concentrated on discovering the essential social/cultural identity of this physical entity and the subsequent functions it 'performs' for the immediate residents of the suburban household and the surrounding neighbourhood. The consequence of this form of sociologism is that not only is nature left out and subsequently needs to be brought back in, but also that the actual diverse physical structures of the garden fail to get discussed. Therefore, the spatial aspect is eliminated from this type of sociological analysis. In order to retrieve the natural and the spatial, we need to investigate the internal dynamics of the garden itself and attempt to explicate the relationships between the social, the natural and the spatial within the physical confines of the front garden. Accordingly we propose that these three aspects of the garden should be seen as processes which can interact with each other to form the essential structure of the garden[1]. We also suggest that the determining process is the social, which establishes the form in which the other two processes operate under.

And this essential social form of the cultural/social is a process of visuality. The concept of visuality attempts to capture the complex nature of gazing, incorporating the subjective process of seeing and the concrete objects seen. Therefore, the process of visuality is a continuous dialectical relationship between seeing and the seen. And as the subjective process of seeing is of a constant factor in

gazing, accordingly it is the visible structures of the seen objects which determine the specificity of the process of visuality. We have located three specific forms of visuality which are present within the physical confines of the front garden. They are the prospect, the panoptic and the aesthetic forms of visuality. All three of these concrete processes of visuality form the 'inner' unity of the general abstract process of visuality which dominates the natural and spatial processes of the front garden. However, the prospect form of visuality is a necessary precondition for the panoptic and aesthetic processes because it creates the physical conditions for 'depth' of vision, - an essential requirement for the other two processes of visuality to operate. But, even before a specific process of visuality can occur, it is necessary to have sufficient space to either see through or to see in. This is provided by the crucial spatial relationship between the suburban house and street thoroughfare, where the front garden acts as a buffer zone between these 'worlds'. We, accordingly begin our analysis at the spatial level and where the garden functions as a buffer zone.

But before we begin, it is necessary to have a brief word on our theoretical process of exposition in which we have engaged with in this paper. As suggested from our above comments, our paper has a definite logical structure to it as we attempt to unfold how the aforementioned processes are linked to each other in complex ways. We follow a precise logical procedure of progressing from one level of analysis to another. This is so because the unfolding of the categories of analysis at one level establishes the form, and thereby the necessary precondition, in which the following structures of next level have to work with (2). Therefore, the spatial level locates the garden as a buffer zone and provides the physical precondition for the emergence of the prospect process. This in turn, leads into the physical and social form of the prospect, which is subsequently absorbed into the process of panoptic visuality.

Consequently, our sequence of analysis follows this succession where we begin with the garden as a buffer zone and then continue on to explicate the essential structures of the prospect visuality and then the panoptic process. And as the panoptic appropriates the prospect visuality within its framework, it is a more complex process of visuality than the prospect one. Consequently, although these two types of visuality have crucial differences which distinguishes the complex from the simple for instance, they also possess common characteristics. One common element (or moment) in these processes is that they are essentially about structuring the garden in order to see through it. But the aesthetic form of visuality, although it appropriates the distanced span of the prospect process, is essentially about gazing into the garden, specifically at designed focal points, - flower beds, shrubs and tree plantings. In constructing the aesthetic visuality through various labour processes, the gardener is creating a spatial entity which is not just a medium or conduit for the prospect and panoptic gazes but also a focal point of attention in itself for gazing upon. Therefore, our analysis of the aesthetic follows on from the our explication of the determinants of the prospect and the panoptic forms of visuality, as the aesthetic visuality can only exist within the physical confining contours laid down by the dicta of the panoptic process. Having uncovered the essential determinants of the social form of the diverse processes of visuality, we reach a point in which we can begin to assess their impact on the natural process of the garden ecosystem.

The natural process of the garden plants and their natural laws of development and growth operate under the social forms provided by the processes of visuality. The gardening labour processes consequently modify the natural ecosystem according to the imposed social forms of visuality. At this point in our analysis we can locate how the garden natural ecosystem and its inherent natural tendency to grow and develop

acts as a countertendency to the imposed societal countenance of plants and their idealised physical location in the garden as established by the social forms of visuality. Therefore, crucially the natural process of the plants form a metabolic relationship with the social processes of visuality within the front garden (3). And finally we examine how the contradictory tendencies of the aesthetic and panoptic forms of visuality can manifest themselves on the empirical level when the street passer-bys attempts to gaze into the front garden and are confronted by the dilemma of competing visual focal points as suggested by these social forms of visuality. A compromise is attained, where the potential long duration of the aesthetic gaze and the continuous attempt by the object of the panoptic gaze to avoid detection, the actual gaze which emerges 'metabolizes' itself into a mere fleeting glance.

The Empirical and Theoretical Limits to the Sociological Conceptualization of the Front Garden

Many sociologists see gardens as cultural objects which represent a wide range of meanings about ourselves (Bhatti 1999; Groening and Schneider 1999; Hoyles 1991; Weigert 1994). Throughout history gardens have presented opportunities for developing connections to nature (Wilson 1991), for expressing power relations and creating aesthetic representations of nature (Verdi 2004: 360). Domestic front gardens (and gardening within) have been presented as a haven and retreat from public life (Kaplan and Kaplan 1989), but, as others have pointed out, it is carried out in a semi-public space (Constantine 1981; Ravetz and Turkington 1995). The distinction between back and front gardens seems particularly relevant here, as they are subjected to different forces and produce different practices. '[R]esidents elaborately tend their

front yards, while using backyards as utility areas' (Grampp 1990: 182). Or, in the words of one of the respondents cited in Bhatti and Church's study (2001) on gardens in the UK:

> My garden is my retreat. The front garden, like the rest, is lawned and open plan: it is very plain. This is intentional … I do not want the front to provide any expectations of what the back is like. The public and private image kept separate! (p. 378).

In opposition to the idea of the front garden being just a private affair, it has also been conceptualised as a place designed for the consumption of others (Grampp 1990). A debate has emerged about aesthetic design features of the front garden. Chevalier (1998) and others contend that front gardens are meant for the private gaze of the owners: a view from the front window. Others assert that the front garden is for public consumption and shaped in a way which maximises its impact on passers-by (e.g. Fiske et al. 1987). In modernity, the most dominant trend in the conceptualization of the front garden is to see it as a signifier of social status: a public space to show off social standing and 'taste'.

In contrast, some have argued that status-seeking through gardening has become an obsession among sociologists rather than a true reflection of what the gardeners themselves think they are doing (Oliver 1981: 191). In the same light of the status-seeking gardener, other sociologists have conceptualised the front garden as a space for facilitating neighbourliness which is invested with a moral value and expresses a commitment to the wider community (Chevalier 1998; Robbins and Sharp 2006; Sime 1993; Weigert 1994). If there is any common theme to these accounts, it

is that they are essentially concerned with how front gardens as cultural objects help to construct an identity (individual and/or communal) for the domestic inhabitants who live behind these semi-public spaces.

However, the overemphasis of the social aspect of gardening in the above works has eliminated the possibility of seeing the front garden as a natural living entity. As a consequence, it has eclipsed the conceptual divide between socio-cultural practices and nature's dynamics by collapsing the two into a single, amorphous notion. This reductionism has taken sociology in a misleading direction, - into the excesses of sociologism, according to Murphy:

> Sociology has correctly emphasized the importance of the social. But there is a point beyond which the rightful place of the social becomes the exaggerated sense of the social, beyond which the enlightened focus on the social becomes a blindness to the relationship between the processes of nature and social action, beyond which sociology becomes sociologism. The assumed dualism between social action and the processes of nature, with sociology focusing solely on the social as independent variable, has mislead sociology into ignoring the dialectical relationship between the two (1995: 694).

Sociologism, therefore, tends to exaggerate the autonomy of social processes and ignores the natural components of the garden environment. The garden, as conceptualised by a sociology characterised by sociologism, is merely represented as an aesthetic object, which performs many and often competing cultural functions for its producers (4).

But sociologism tends not only to elide the natural processes but also spatial aspects of the garden – front and back – where architectural structures and design features are crucial determinants in constructing its 'shape'. To avoid the pitfalls of sociologism, we thus need to develop an analysis that combines the social with the natural and the spatial. We propose that the social processes which operate in this spatial entity are essentially visual in determination. And this visual tendency is captured in the concept of visuality. This general abstract process of visuality both shapes and reflects various gardening labour processes. As a consequence, gardening is about creating the material and spatial conditions in which the general abstract process of visuality operates (5). All of the levels mentioned – the social, the spatial and the natural – provide various moments for the process of visuality to reproduce itself. For example, a hedge can simultaneously be shaped to look pretty (social) and can act as a barrier of entry (spatial) while its physical structure remains a living plant (natural) We will now turn to the presentation and analysis of some empirical material that exemplifies the visual qualities of front gardens and their respective social processes.

Methodology and empirical findings

To investigate the visuality of front gardens, we used a visual methodology and conducted a photographic survey of gardens in five areas of Dublin – Castleknock, Templeogue, Leixlip, Lucan, and Walkinstown – which were selected according to their socio-economic profile and level of affluence. Ten gardens were drawn from each of the areas.

After receiving permission from the residents, the fifty front gardens were photographed from different angles, yielding more than three hundred photos. They form the empirical basis for the analysis which follows. Ten in-depth interviews were also subsequently conducted.

By engaging in a content analysis of the photographs, we discovered trends in the shapes of the gardens surveyed that suggested differing social processes were operating in the garden. These were not always obvious to immediate observation and on the spot

interpretation. By photographing and analysing the spatial orientation of the planting techniques and inorganic structures – their aspects and focal points (6), we were able to compare and contrast the spatial dimensions of the front gardens and uncover trends in their architectural features. For example, Figure 1 shows how the householder has unimpeded view of the street, yet is unable to see their neighbouring house entrance because of the high hedge and tree acting as a screen between the two front gardens.

1: *The 'funnel' effect*

Insert Photo 1 here

These spatial orientations were noted and their frequency was counted as we surveyed the photographs. In this way we discovered that 42 gardens (84%) had an uninterrupted view of the street while many had a screen-like structure between neighbouring gardens. Overall, our photographic survey threw up the following empirical and spatial trends:

- All gardens had definite boundaries between themselves and the street;

- Front gardens were not used for domestic purposes by the householders, with the exception of car parking;

- Most gardens had low boundaries on the street-side and high boundaries between the neighbouring gardens, 'screening' them from their immediate neighbours;

- A majority of the houses had a screen or light curtain in their front windows and doors

- All gardens had a strong aesthetic dimension to them which included architectural features as well as natural plantings.

In attempting to make sense of these empirical and spatial trends, we can detect a number of contradictions which manifest themselves in or through the spatial entity of the garden. The physical boundaries which surround the garden inhibit physical movement into the front garden, yet the aesthetic display encourages visual engagement. Therefore, privacy is not an issue with regard to the public seeing into the garden from the street-side, yet it is an issue with regard to one's immediate neighbours as a screen tends to block the adjoining neighbours. While the public are allowed to view the garden they are hindered in seeing into the house itself by the presence of net curtains on the front windows and doors. To unravel the nature of these contradictions we thus need to investigate the essential structure of the front garden and those forces which determine that structure. And as front gardens are designed and constructed by human endeavours, in combination with the forces of nature inherent in natural ecosystems, their visual analysis helps to uncover some of the complex interactions between social and natural processes.

The suburban front garden as 'buffer' zone

In his work, *The Decline of Public Man*, Richard Sennett distinguishes street and the home as two differing types of living spaces, the street is conceptualised as 'outer life' and the domestic house as 'inner life'. As the street facilitates contact with the threatening 'others', this contact must be negotiated: so as a way of interacting with other people on the basis of their differences. The inner life, on the contrary, revolves around what is shared and belongs to the family. It offers order and clarity while the outer space of the city is ever changing, never completed and necessarily ambiguous. In spatial terms, the social process of inner life inhabits the physical confines of the domestic house.

Sennet's distinction between inner and outer life also ties in with Ravetz and Turkington's (1995) concept of the garden as 'buffer zone' between public and private sphere:

> […] privacy was combined with decorative enclosure and display. Smog-resistant pivet hedging could be trimmed with military precision, iron railings could be defensive but also ornamental. Low walls with railings or fences with hedges could shield the front of the house from both street and side neighbours, and a floral arrangement in the front garden could be enjoyed equally from within and without. […] The primary function of these (front gardens) was to mark the boundary and act as a 'buffer zone' between the private home and the public street (p.180).

From our photographic survey, we discovered that, besides the parking of cars and the storage of garbage bins, front gardens are typically not utilised. Only eight of the fifty randomly selected gardens we surveyed appeared to be used in some way: toys or balls scattered on the lawn; basketball nets installed on the wall; a cosy spot for pets. In contrast, many gardens featured benches which were positioned as a decorative feature, and were used mainly for ornamental purposes – to be seen rather than to see from. This is confirmed in some of the interviews: 'I am never out in the front' and 'the front garden is more of a parking space than a garden'. The front gardens surveyed thus do not fall into the category of 'inner life' as they are not really utilised by their owners. Neither do they aspire to being a space determined by the outer life of the street.

Many gardens in our survey had clearly defined, low boundaries between the garden and the public street which facilitated 'gazing', though some gardens in the exclusive suburbs of Castleknock and the middle-class suburbs of Templeogue featured high street boundaries. Overall, a reliance on boundaries to protect privacy did not appear to be very widespread and this was confirmed in interviews with some of the residents. Most respondents did not express concern for the privacy of their front garden. The reason for this probably lies in the character of the passer-bys. Because of the way housing estates in Dublin are constructed as 'cul-de-sacs', they effectively segregate the various socio-economic categories from each other. As a consequence rarely do perfect strangers walk past a front garden. Mainly neighbours and other residents in the locality make up the population of passer-bys: they are of 'the same kind', known to each other, at least by sight. They do not produce 'alterity'. For this reason the front garden and the street represents a public space of a particular

kind: one which does not require an exercise in civility, in Sennett terms, but activates a sense of neighbourliness rather than face to face interaction with total strangers.

Consequently, because of the presence of low street boundaries and the likelihood that the passer-bys are actually neighbours, the front garden space acts as a *buffer zone between domestic sphere and the public realm of the suburban street.* Therefore, the front garden does not fall within the spatial realms of the inner or outer lives, as conceptualised by Sennett, but stands 'betwixt and between' these two types of living space. This suggests that Sennett`s framework may be applicable to urban street spaces but not necessarily to suburbia.

Visuality and the front garden: Creating physical preconditions for prospect gazing

A prospect describes a spatial relationship where an observer can see across an extended spatial plane without any impediments to his or her vision (Appleton 1996). This sweep of observable landscape can be contrasted with the visual characteristics of a normal urban street, which are inherently 'close-focused, restricted and canalised' (Sharp 1946: 65). In contrast to the urban where there is no spatial distance between the households and the street pavements, the suburban garden spatially separates the houses from the street. This process of distancing is a necessary precondition for the emergence of a prospect. With regard to the front garden, the householder or the street observer have an interrupted view through the physical mediation of the garden: the householder can see out and the street passer-by can see in. One respondent in our survey preferred to keep his hedge low on the streetside in order to see passers-by when driving out his driveway. Another complained about the increasing dimensions of his garden trees as they 'screen' the house and the garden too much from the street

and he consequently plans to remove them. Both of these respondents demonstrate their awareness of maintaining a prospect plane through their respective gardens. Therefore, the front garden not only functions as a buffer zone but its physical dimensions are also 'levelled' to maintain a prospect. This levelling is achieved by the domestic gardener cutting back hedges and shrubs, or even eliminating obstructing plants in order to have a prospect. Accordingly, a front garden prospect is determined by an observing individual who wishes to see across the garden from any angle and towards any direction.

In general, the view achieved through prospect gazing is one without people: a deserted street or an unoccupied garden. But other times the prospect observed can in actual fact be another viewing subject. Herein, the dynamics of the prospect visuality dramatically change, as this potential social interaction creates the conditions for intervisibility between two subjects which may or may not initiate social interaction. If so, the meandering span of the people less prospect is superseded by the more focused attention of two interacting subjectivities. Most of the interviews conducted in Dublin stress the importance of the garden for neighbourly interaction. They state that neighbours stop to talk as they pass by the garden, and they themselves also stop to talk to neighbours when they pass by their gardens and see the resident pottering around.

However, in the concrete situation of the front garden, the buffer zone's ability to maintain the mutually inclusive aspect of the process of intervisibility is challenged by the occupant of the 'inner life' ability to hide while being able to continue to observe, - 'to see without been seen'. Thus the occupant(s) of the inner life space is able to hide because this particular occupant is usually 'embedded' in the built edifice of the house. In this new form, the spatial extremity of the inner life along the buffer

zone continuum emerges as a space which has a prospect but also is a physical 'hide' embedded in the concrete structure of the house. But at the other extremity of the buffer zone there appears another edifice of a wall or fence which 'protects' the buffer zone from intrusion. This is the bulwark!

The social functions of the 'bulwark' and the 'hide' in the buffer zone.

According to Appleton (1996), the essential feature of an observing subject is to have the protection of a refuge so that the 'seer' cannot be seen (p.91). Consequently, in Appleton's framework, a refuge is diametrically opposite to the idea of prospect as the subject attempts to get out of the line of visibility and hide away from the peering eyes of others. However, we prefer to use the concept of the hide rather than the refuge as the hide in wildlife practices is more about camouflage than seeking security as in a refuge. And with regard to the concrete example of the front garden the hide crucially involves concealing the domestic observer from the passer- bys of the outer life sphere, - the street travellers.

In our analysis of the determinants of the front garden, this is the first opportunity we have to explore the relationship between front garden and house, particularly with regard to the socio-spatial functions of the garden vis-à-vis the house as a place of concealment. In the emergence of American suburbia in the nineteenth century, creating domestic privacy and establishing the home as refuge/hide was a determining factor in the architectural design of suburbia:

The desire to be insulated from urban chaos prompted new architectural forms. Leading architects built houses which deliberately sheltered the well-to-do

from the passer-by and the urban scene. [....] The middle class manipulated and formed its environment as a bulwark against the city (Kleinberg 1999: 147).

And

There are several reasons for the 'need' of the suburban lawn. One reason is a desire to remove one's family away from the rest of the population. This is exemplified in the fact that the middle class deliberately reshaped the landscape by surrounding single-family homes with yards in their new communities to strengthen the power of the family (Clarke 1986: 238).

And this was achieved by spatially reconfiguring the relationship of the domestic house to the public street by constructing a front garden between them:

'Lawns, fences and distance from the urban core minimised intrusions, allowing the middle-class housewife to exercise control over her domain, safe from threats posed by outsiders. Instead of being situated directly on the street, suburban homes had a front garden and a large strip of lawn as green insulation from the threatening outside world' (Kleinberg 1999: 148).

Therefore, what is essential for this type of spatial 'insulation' to work is to have real or symbolic boundaries which are clearly defined and which act as a deterrent to the physical intrusion by 'outsiders', not only into the house but also towards it. In this spatial relationship, the front garden is bounded by the house at one end of the buffer

zone, and a clearly identifiable barrier at the other end. The photographs of front gardens gathered in our survey gave a measure of the extent to which gardens were bounded spatial areas. All of our front gardens displayed clear and definite boundaries with adjacent gardens and the street. Dense hedges, palisades, walls, heavy fencing were used to maintain these boundaries. The great majority of our surveyed front gardens displayed definite boundaries between themselves and the street. Although, the bulwarks of the front garden were generally low, they acted as barriers to the physical movement of outsiders towards the house.

But if the bulwark of the garden impeded physical intrusion at one end of the buffer zone, certain physical features of the house itself restricted visual contact. For example, windows and glassed doors provide not only mediums to see out but also conceal the inner life of the house.

2. The 'hide' of curtains.

This occurs in general on account of the differences in the intensity of light between the exterior and interior spaces of the house. As the major source of natural daylight is the sun, the exterior of building tends to be brighter than the interior space. And as Appleton suggests, light is conducive to seeing and deprivation of light is conducive to being not seen. This tendency to hide in the natural shade of the dwelling can be intensified by the hanging of net curtains or other opaque coverings. In our survey, we discovered that thirty eight out of the fifty investigated houses had a form of screen or light curtain hanging in their front windows, creating an advantage for the insider observer to engage in street gazing:

> The frame of a picture is like the frame of a window, and what better expresses the prospect-refuge complement than the old lady peering out on to the street from the gloom of an interior, veiled perhaps by net curtains, and hiding the greater part of her person behind the walls! By edging sideways beyond the frame of the window, she in a trice, achieve complete concealment. Strategically her situation is superb! (Appleton 1996: 114)

This physically advantageous position of the house for gazing upon the streetscape and its passer-bys, coupled with its inherent social forms of being a prospect and a hide simultaneously, creates the preconditions for the emergence of a novel, more dominating form of gazing - *the panoptic gaze*. To investigate this social form of the front garden, we need to turn to the theoretical works of Michel Foucault, and specifically his concepts of the panopticon.

The 'gardened' house as a panopticon:

Michel Foucault in *Discipline and Punish* (1977) argued that the emergence of disciplinary forms of power sought to spatially exclude and confine deviants from everyday society within specific institutions. These institutions were a necessary precondition for the emergence of modernity. But crucially the modern institutions were 'housed' in new architectural designs that allowed maximum surveillance over its inmates. The ultimate surveillance building was based upon Jeremy Bentham's Panopticon or Inspection-house design. Foucault described the architectural principles which this design was based upon:

> ….at the periphery, an annular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside, corresponding to the windows of the tower; the other, on the outside, allows light to cross the cell from one end to the other….By the effect of backlighting, one can observe from the tower, standing out precisely against the light, the small captive shadows in the cells of the periphery (p.200).

Our analysis shows that some (if not all) of these fundamental principles of the panoptic design are also evident in the spatial relationships between suburban houses, their front gardens and the street thoroughfare.

3.The 'panoptic' garden.

These principles are physically mediated through and embedded in the structures of the front garden. The house 'plays' the role of the tower and the peripheric structure is the bulwark between garden and street. The crucial effect of *backlighting* described by Foucault is achieved in the front garden by the low height of the boundary, which frames passer-bys against the backdrop of neighbouring gardens, especially those that are on the opposite side of the street from the panoptic house/tower. Even though the passer-bys are not incarcerated inmates of the panopticon, they are captive to the powerful visibility of the panoptic mechanism of surveillance. Foucault (1977) expressed this idea in the phrase 'visibility is a trap' brought about by:

> The panoptic mechanism [*which*] arranges spatial unities that make it possible
> to see constantly and to recognise immediately…. Each individual, in his

place, is securely confined to a cell from which he is seen from the front by the supervisor; but the sidewalls prevent him from coming into contact with his companions. He is seen, but he does not see; he is the object of information, never a subject in communication (p.200).

In the panoptic complex of the suburban house, front garden, and streetscape, the inspector is now the inhabitant of the house and the 'inmates' are actually those people who pass by the front boundaries of the garden. Although the hypothetical tower is now flattened and the spatial location of the inmates and inspector are reversed, the same panoptic principles hold. What determines the continuing presence of the panoptic surveillance characteristics in our garden situation are the existence of the spatial boundaries which separate the 'inspector' from the 'inmates' and the maintenance of the visibility of the street 'inmates' by the domestic 'inspector' and thereby makes 'it possible to see constantly and to recognise immediately'. Also, because of the 'hide-like' effect of the differing contrasts between the exterior and interior of the house with regard to varying intensity of light, the inspector is generally hidden from view, in order to fulfil the basic requirement of the panoptic gaze, that is, to see without being seen. According to Foucault (1977), this dialectic relationship is expressed in the panopticon's architectural structures:

The Panopticon is a machine for dissociating the see/being seen dyad: in the peripheric ring, one is totally seen, without ever seeing; in the central tower, one sees everything without ever being seen (p.201–202).

In the concrete situation of the front garden, this panoptic 'dissociation' is also present, with the 'panoptic' house and the 'distanced' boundary bulwarks creating the physical conditions for the emergence of the panoptic gaze.

However, not all front gardens have this essential requirement of low boundary walls and fences. Our photographic survey revealed interesting contradictions with regard to the differing heights of the boundary walls and fences. Only in some of the rather exclusive, middle-class areas did we observe high and thick street boundaries, mainly in the form of privet hedge or high concrete walls. High boundaries hardly figured at all in the less exclusive neighbourhoods, and rarely on the street but some did exist between neighbouring gardens. Only eight out of the fifty residences investigated had such high street boundaries. Castleknock and Templeogue displayed the highest number (three each) of such boundaries. Overall, the reliance on high boundaries to protect privacy was not very widespread. More crucially perhaps, such boundaries were used to screen residents more from their neighbours than from the public gaze. High neighbouring boundaries protected the panoptic inspector from receiving similar surveillance to that he/she was engaged in and created a more exclusive form of privacy by preventing people looking in from the street. To use Foucault's terminology, the sidewalls prevent him (now the panoptic inspector) from coming into contact with his companions (his immediate neighbours). This is especially true when solid gates compliment the high boundaries, creating a completely enclosed space which guarantees privacy by excluding all forms of public intrusion while allowing sufficient natural light to reach the house. More importantly, these contrasting functions - eliminating public gazing and getting adequate light - can only be achieved through adequate spatial distance between the house and the front boundary. Our observations show that the necessary space for

absolute privacy is hardly ever available in less exclusive neighbourhoods. Instead, high street boundaries are an attribute of the properties of rich suburban dwellers.

The crucial difference between a prospect and panoptic gazing is that in the latter situation the mutual recognition of the viewing subjects across the buffer zone is undermined by the householders' ability to see and not be seen by the street occupiers. In this situation of restricted intervisibility, the prying householder dominates: (s)he can stand and stare in the 'comfort and security' of their home space at the 'inmates' of the street without having to recognize the mutual subjectivity that the 'objects' of observation also possess. Unhindered by the need to perform 'civility', the panoptic gazer is free to 'observe performances, to map aptitudes, to assess characters, to draw up rigorous classifications' (Foucault 1977: 203). Herein, lies the power structure of the panoptic mechanism, where the object of the panoptic gaze has no ability to engage in a similar process of categorization. This occurs because the street passer-by is unable to see his observer and therefore unable to categorize the occupier of the house. As we have already noted Foucault expressed this power relationship in the following way: 'He is seen, but does not see; he is the object of information, never the subject in communication' (ibid., p. 200).

In contrast, the street passer-by has no ability to resist both observation and categorisation by the panoptic gazer. Attempts to overcome this dominating surveillance relationship and to put a face on the 'faceless' gazer are likely to remain unsuccessful. The observer will remain hidden or only appear as a shadowy figure in a window. What the passer-by will definitely see is the physical dimensions of the house. As a result, the abstract social process of panoptic visuality 'embeds' itself permanently in the architectural structures of the house. This material manifestation of a social process preserves the activity of panoptic surveillance beyond the duration of

observing. In a very real sense, the physical reification of panoptic visuality is achieved when the passer-bys become aware of the house and the physical structures of the front garden as the focal point of the panoptic social process (7).

The aesthetic visuality: Its 'coming into being' and its specific social form

The front garden contains not only man-made surfaces and architectural structures which mediate and subsequently help to reproduce the various social forms of visuality but is also characterised by a plethora of natural processes and objects which are central to the the relationship between society and its spatial setting. Nature in the front garden both helps and hinders the societal process of visuality while adding an aesthetic dimension. Accordingly, nature is aestheticized in various designed frameworks which present these front gardens for public display. Whiston Spirn (1997) emphasises not only the natural and artificial aspects of gardens but also how they are a consequence of designed forms:

> Whether wild or clipped, composed of curved lines or straight, living plants and plastic, every garden is a product of natural phenomena and human artifice. […] Landscape architects construct nature both literally and figuratively, but the history of twentieth century landscape architecture has being told as a history of forms rather than a history of ideas and rhetorical expression (p.249–257).

These forms of garden designs are essentially about how plants and built artefacts are arranged in spatial relationships with each other to form a composition. And because

gardens are about 'coaxing and persuading' nature into prearranged spatial relationships, and ornamental shapes, they take on aspects of social forms. The social construction of plants as ornamental and architectural structures of the garden is put in practice by purposely rearranging the spatial relationships between the plants, by manicuring the surface appearances of the plants, through trimming, pruning or mowing, and finally, by eliminating undesirable plants through mechanical weeding and the use of herbicides. The result is a certain 'pictorial look' which celebrates an aesthetic rendition (Crandell 1993).

The history of this 'pictorial look' goes back to the picturesque parks and landscape gardens of Lancelot 'Capability' Brown whose construction coincided with the modernisation and industrialisation of England in the eighteenth and nineteenth century. These gardens were designed to look like painted pictures and were subsequently called the gardens of the picturesque. This picturesque characteristic was essential to designing a natural feel to these gardens. And although the picturesque garden had an ideology of appreciating nature as a 'soothing retreat from modern urbanism' (Helmreich 1997: 84), it was a highly artificial creation, relying on horticultural manipulation and technology. As the lawn was dominant spatial entity of the picturesque, its aesthetic 'look' was initially maintained by animal power. Livestock grazing was the 'technology' of lawn production prior to the invention of the lawnmower in 1830 (Lowen 1991: 50).

But behind the pictorial appearance of the garden was the ideology of the rural idyllic and an inherent anti-urbanism (Slater 2007). According to this view, the desired spatial location for human habitation was to be the 'gardened' landscapes of the rural countryside rather than urban cities and towns. In consequence, living this ideal meant moving towards the countryside and constructing as much as possible the

Brownian landscape, including the essential feature of the grass lawn. As a consequence, the pastoral ideal fuelled an urban exodus, beginning with society's elite and their landed estates in the eighteenth century, and then moving down to the upper middle classes and the emergence of suburbia in America and Britain in the nineteenth century (Bormann et al. 1993; Jackson 1985). The spatial expansion and subsequent suburbanisation of many Western cities also brought about the diffusion and 'mainstreaming' of Brownian design conventions. This trend is reflected in varying attempts to incorporate the essential physical characteristics of the Brownian landscape with decreasing housing lot sizes in the ever expanding suburbia. Water features tended to be eliminated, while the lawn, and to a lesser extent the trees were retained. The pure Brownian landscape was being diluted as it shrunk in physical size, leaving fewer physical icons to represent the romantic rural idyllic. It is from here that the front garden aesthetic comes into being in suburbia (Fishman 1987).

The evolution of the picturesque garden from the eighteenth to the twenty-first century, which is rooted in the 'artful' cultivation of nature through various types of gardening labour processes, also allows us to chart the changing relationship between human society and physical environment. The apparently 'natural' appearance of the garden tends to disguise not only its manufactured origins but also those historically embedded social processes of visuality which directed its production. And while plants remain within the realm of the natural ecosystem, they are also 'culturalised' and 'perform' various types of aesthetic functions within the overall 'pictorial' composition of the garden.

One of the crucial aesthetic functions of plants is to soften the hard textures and the break-up the continuous sharp-edged lines of the built artefacts of the front garden including the house. For example, Ingram (1982) proposes that trees not only

'soften' the lines of the house but he also identifies particular shapes in the 'architectural' structure of trees in order to perform this 'softening' role:

> Vertical lines of many houses can be effectively softened by small tree planted in conjunction with other plants at a corner. Tree shape is very important. A low-branched, rounded tree softens this line while a slender upright tree only accents the line (p.12).
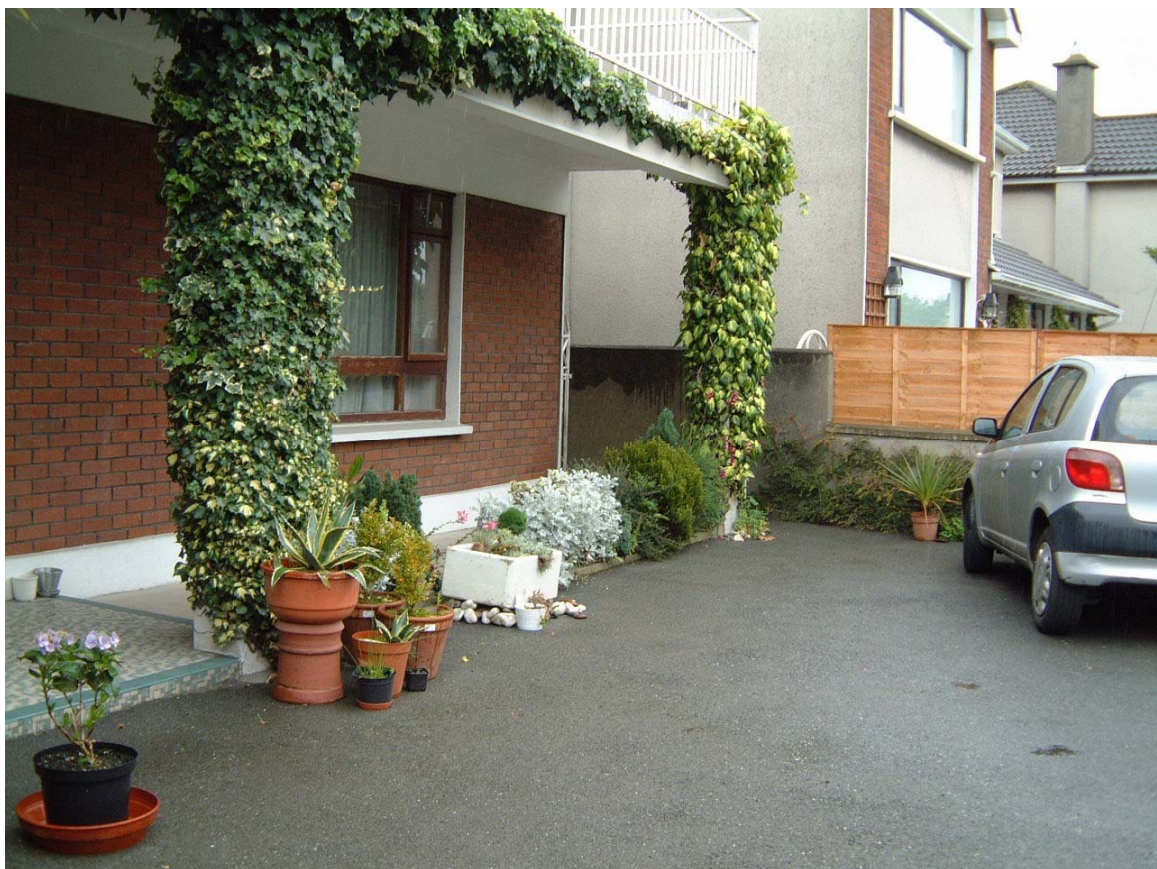
4. The 'softening' by nature.

Another use of natural entities in the social setting of the garden, according to Ingram (1982), is to help the garden observer to visually appreciate the 'pictorial look' presented:

A moderate amount of open area in the front yard can create the feeling of a large expansive area that allows the observer's eye to move from the street to the planted areas (p.13).

In 'creating a feeling' or producing a 'visual effect' the gardener is performing an artistic act similar to a painter of landscape. In fact, gardeners use the same artistic conventions in producing the 'effect' of perspective as landscape painters. Rose (1983) advises his readers to engage in these perspective tricks:

'To obtain a greater feeling of space, narrow plots may have to be 'widened' and short plots 'lengthened' artificially by playing perspective tricks, such as leading the eye across the plot to make a narrow area look deceptively wide. Lines leading down the garden away from the eye will give the impression of greater length. This can be heightened by reducing the width of such features as terraces, paths or beds as they run down the garden. [….] These simple perspective tricks work remarkably well and are very easy to contrive' (p.16).

In covering various types of surfaces within the garden and those of its boundaries, the natural forms of plants not only 'naturalise' but also unify the setting by masking over the diverse physical differences of built structures. In summary, garden plants function as an aesthetic veneer and are the most visible concrete form in which a garden becomes an object of display in itself.

Nature within the social forms of visuality

As stated previously, panoptic visuality is maintained through specific spatial relationships between house, garden and street. Consequently, the architectural aspects of the garden, including its plants, must respond to these spatial requirements. Since the panoptic process determines the physical layout of the front garden, at least to some extent, the aesthetic form of the gardens tends to operate within particular spatial confines. Consequently, the aesthetic veneer both reflects and reproduces many of the panoptic physical structures. Plants and man-made structures such as paths, paving stones and pots produce and maintain panoptic structures, and at the same time reflect and reproduce aesthetic standards. Plants thus perform social and cultural functions but also retain their natural characteristics. They have their own developmental tendencies and exist independent from their respective social functions. As Marx commented in a letter to Kugelmann, dated 1868:

> No natural laws can be done away with. What can change is the form in which these laws operate (Marx and Engels 1934: 246).

In the case of the front garden, the form in which the natural laws operate is determined by the panoptic and aesthetic dimensions of visuality. For example, the lawn is a crucial spatial component for both prospect and panoptic visuality. The inherent 'flatness' of the lawn facilitates observation from a distance while its aesthetic form can act as a backdrop or foil for more dramatic displays of shrubs, hedges and tree (Strong 1994:108). But it must be kept mowed:

Lawn is a canvass on which the rest of the plantings are placed. A beautiful lawn will enhance any landscape, while a poor lawn will detract from the overall appearance (McCarty et al. 1995: 3).

The attractiveness of the lawn 'canvass' or canopy is minimally maintained by the continuous labour process of mowing. Mowing creates a new natural form in which the grass ecosystem has to now operate under. This modified ecosystem loses not only the embedded nutrients with the disposal of the grass clippings but also those naturally occurring activities which take place in the upper sections of the grass plant above the cut line. Such activities include the storage of water, the flowering of the plant and the production of seeds. These missing activities within the modified grass ecosystem have subsequently to be replaced by various forms of human intervention, such as irrigation, over-seeding and the application of fertilizer and other forms of chemical inputs (Bormann et al., 1993). Ironically, a 'natural' lawn which is imbued with an aesthetic countenance has a tendency to look artificial:

Lawn-making is the art that conceals art: it is, in fact, the only aspect of gardening that hides both the work done and the nature of the plant life itself. A lawn that achieves perfection ceases to look like plant matter and resembles a fake version of itself. It has no bumps, no weeds, and no variations in colour: from a distance, the perfect close-mown lawn is indistinguishable from Astroturf (Fulford 1998: 1)

Accordingly, the labour process of mowing is not just about an attempt to reify the naturally tendencies of the grass to growth vertically towards the sunlight. It is

also about human intervention: rendering the grass lawn as an aesthetic object which is 'constructed' by the household gardener for its display characteristics (Jenkins 1994). A 'poor' lawn occurs when the natural ecosystem breaks out of its aesthetic straitjacket (Feagan and Ripmeester 1991). The immediate effect is that the lawn canopy breaks up as the grass grows into clumps and dykes of differing heights. As a consequence, the smooth texture of the lawn canopy is lost. It can be restored by mowing and subsequently putting the grass ecosystem back into its 'iron cage' of the panoptic and aesthetic forms of human intervention. Therefore, the natural tendency of lawns and other plant ecosystems in the front garden is to counteract the imposed social forms. For example, without human intervention through the labour process of trimming, hedges may take on 'an unpleasing shape' that resists panoptic and aesthetic forms:

> Left unclipped to grow as it pleases this hedging will develop an unpleasing shape. Radical pruning can be used to remodel it (Rose 1983: 18).

And herein lies the relentless struggle which takes place in both front and back garden and which is symbolic of the ever present contradiction between nature and society. The restless powers of nature, determined by its inherent laws of motion (growth), are pitted against societal forces which manifest themselves in various types of gardening labour processes. These labour processes attempt to give the plant ecosystem a societal countenance within an idealised spatial location which is of necessity at variance to its naturally occurring countenance of the plants within their own organic environment. Nature organically blossoms, while society attempts to reify. Hence in the garden the 'superstructure' of nature is humanized while the 'base' of humanly

built structures is naturalized (Smith 1990: 19). Naturally, these processes do not exist independent of each other but are intertwined through a metabolic relationship (Foster 1999). According to Smith, it was Marx's concept of a societal metabolism that opened up a completely new understanding of man's relationship to nature and its connections with the labour process:

> Labour process….regulates and controls the metabolism between himself and nature. He confronts the materials of nature as a force of nature. He sets in motion the natural forces…in order to appropriate the materials of nature in a form adopted to his needs (Marx 1976: 283, in Smith 1990: 19).

The 'needs' in our case are adopted to the social forms of visuality which have 'metabolized' with the natural forces of the plant ecosystems to produce the phenomenon of the suburban front garden.

The 'distracted' glance of the neighbourhood passer-by

A crucial aspect of the front garden, as we have argued in this paper, is its visuality, which shapes its spatial qualities in complex ways. It determines not only the layout of the garden but also many of the activities that take place within it. However, although visuality is a key social determinant of the garden, it also takes on different functional forms which can come into conflict with each other. Contradictions between the aesthetic and the panoptic forms of visualities can manifest themselves in diverse ways. The propensity of the passer-by to look away from the panopticon of the house in order to avoid being identified and categorised constitutes one possible

outcome. Attempting to conceal one's subjectivity is helped by never stopping to stare at the panopticon. 'Passing by' in this context becomes a crucial form of resistance to panoptic surveillance. Therefore, whatever type of gaze that the passer-by may engage in, it will have to be one which is done while moving. This inherent reaction to the 'panopticon surveillance machine' on behalf of the passer-by is that of continuing mobility. 'Passing-by' in this context becomes a crucial form of resistance to the panoptic gaze. However, this situation of the need to continual move is at adherence to the ideal position needed to engage in the aesthetic gaze.

The aesthetic role of the front garden has determined one of its essential characteristics, that is, its exhibition value (Benjamin 1992: 218). Benjamin (1992) has argued that the exhibition value is about creating an object so that it can be put on view and visually appropriated by others than the producers. But this visual form of appropriation is achieved in a state of concentration, where 'a man who concentrates before a work of art is absorbed by it' (Benjamin 1992: 241). However, the reception of the front garden as a work of art with exhibition value needs to be achieved not only in a state of mental concentration but one in which the connoisseur is in a physical stationary position. But this desired state of concentration cannot be achieved by our passer-by as the panoptic visuality cuts across the potential aesthetic experience of the garden as he/she is propelled to keep moving in order to avoid the surveillance of the panopticon. Caught 'betwixt and between' the aesthetic and the panoptic forms of visuality, the passer-by can only give a fleeting glance at the aesthetic garden display. Savage (2000) has interpreted Benjamin's conceptualisation of this situation as a state of distraction:

'Reception of art in a state of distraction, however, does not involve 'rapt attention [but] noticing the object in an incidental fashion' (Benjamin, p.242) … Benjamin makes it clear that architecture offers the best example of an art from which is perceived in distraction, by passers-by. […] distracted passer-by gaze at buildings only in passing' (p. 46).

While caught in a state of distraction not caused by 'habit' of familiarity (Benjamin 1992: 233) but by the ever-present process of panoptic visuality, our suburban passer-bys can only glance fleetingly at their front garden 'works of art'.

Conclusions

In our analysis of the determinants of the suburban front garden we discovered that it was determined by an ensemble of diverse social and natural processes. This combined metabolic relationships between nature and society is located at many intersections of this metabolic system. The only common aspect of these diverse levels of interaction is that it occurs during gardening labour processes. However, the gardening labour processes are themselves distinguished by the type of social entity they are producing. These social entities or forms in the context of the front garden we conceptualised as forms of visuality, the prospect, the panoptic and the aesthetic. Accordingly, the particular combination between nature and society under the social form of the aesthetic will be quite different from that under the panoptic visuality. The latter moulds the natural structures of the plant ecosystem to enhance the visibility of the street from the house, while the former attempts to construct the natural plantings as an exhibitionary objects, to be neighbourly 'works of art'. As a consequence, the metabolic relationship between nature and society with regard to the front garden can

not be explicated at a general level, such as the garden entity as a whole, but only at the particular level of the social forms of production, which in the case of the front garden are the diverse forms of visuality. Any search for a general definition of this metabolic relationship will be remain within the mists of idealism, or the specific sociological version of this type of idealism, sociologism.

Similarly with regard to understanding the relationship between the private and the public spheres. 'Public' accessibility to the front garden is very much determined by the particular social form of visibility which the outsider attempts to gain access through. For example, the panoptic process of visuality and its crucial physical structure/moment of the boundary bulwark prevents any form of physical intrusion into the garden, while the aesthetic form actually encourages the passing public to gaze within. These contradictions and others which we identified in our introduction we can now explain the actual circumstances they come about and how they are an intrinsic part of the suburban front garden, - a spatial entity determined by diverse social forms of visuality.

Postscript

But in order to get a better understanding of this crucial metabolic relationship between society and nature, we believe that it is necessary to develop our analysis further in two opposing directions, - one empirical, - the other theoretical. With regard to the empirical, we propose that it would be worthwhile to examine other leisure spaces, such as public parks, golf courses and turf playing surfaces, where the social forms are not just visual but also may possess a social form which extols durability and resilience to footfall. The apparent contradiction between the social forms of

visuality and durability would be interesting to investigate how they impact on the natural process of the plant structures in contradictory ways. The theoretical direction which we also believe is worth pursuing is that which would involve pushing the theoretical apparatus of this paper onto another level (or stage) into the actual internal metabolic structures of the plants themselves in order to uncover how the social forms of visuality of the garden determine the metabolic processes of the plants. Involved in this level of analysis would be to examine how the gardener reconstitutes the metabolic conditions of the plant ecosystem in order to enhance the social form of their visuality. Subsequently, it will be necessary to assess how gardener uses artificial chemicals to realize the 'visual effect'. To achieve this deeper understanding of the socio-ecological metabolism of the plant ecosystem, we also contend that it is necessary to investigate not only the changing propensity of chemicals both natural and artificial to flow through the metabolic pathways of the plant but crucially also the actual changing structures of the metabolic pathways themselves. The grass lawn looks likely to be the most appropriate plant ecosystem for this type of research as it is the spatially the most dominant plant ecosystem in the front gardens of suburbia.

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FOOTNOTES.

1. The authors would like to thank Aine McDonough, who carried out the photographic survey for our Dublin suburban garden project. The project was funded by NIRSA.

2. According to Banaji, Marx best expressed his method of presentation as an 'expanding curve' or spiral-movement composed of specific cycles of abstraction. Each cycle of abstraction begins and ends in the realm of appearances while the intervening analysis is concerned with the essential abstract form which determines the specific structure of that particular cycle:

    'In the dialectical method of development the movement from the abstract to concrete is not a straight-line process. One returns to the concrete at expanded levels of the total curve, reconstructing the surface of society by 'stages', as a structure of several dimensions. And this implies, finally, that in Marx's *Capital* we shall find a continuous 'oscillation between essence and appearance '(Banaji, 1979,40).

3. Hayward argued that 'this metabolism is regulated from the side of nature by the natural laws governing the various physical processes involved, and from the side of society by institutionalised norms governing the division of labour and the distribution of wealth etc.(within Capitalism). It is through the labour process that the social processes of society metabolizes with the processes of nature:

> 'Labour is, first of all, a process between man and nature, through his own actions, mediates, regulates and controls the metabolism between himself and nature. He sets in motion the natural forces….., in order to appropriate the materials of nature in a form adopted to his own needs…..He develops the potentialities slumbering within nature, and subjects the play of its forces to his own sovereign power' (Capital, vol.1:284).

4. The central concerns of the above 'garden' sociologists have reflected a general trend in sociology in the 1990s and that has been the emergence of the cultural 'turn' in sociology. And as Buttel stresses cultural sociology in particular and conventional sociology in general for the most part of the twentieth century has paid little attention to the biophysical environment (Buttel 1996).

5. It could be argued that the Sociology of the front garden fell into the same theoretical trap as Marx suggested that Political Economy did with regard to private property, in that Political Economy proceeded from the fact of private property. It did not explain how it came into existence. In a similar criticism of Sociology, it could also be suggested that Sociology proceeds from the fact of the visualiness of the front garden. But crucially, it does not explain it.

6. According to Jack Ingels the focalization of interest is the principle of design that selects and positions visually strong items into the landscape composition. Focal points can be created using plants, hardscape items and architectural elements (Ingels, 2004:133).

7. This is becomes apparent when we remember that the passer-bys in their own respective abodes are themselves potential panoptic observers.

References

Appleton, Jay. 1996. *The Experience of Landscape,* 2nd edition. New York: John Wiley

Banaji, Jairus. 1979. 'From the Commodity to Capital: Hegel's Dialectic in Marx's Capital' in *Value: The Representation of Labour in Capitalism,* edited by Diane Elson. London, CSE Books.

Bhatti, Mark. 1999. "The Meaning of Gardens in the Age of Risk." Pp. 181–193 in *Ideal Homes? Social Change and Domestic Life*, ed. T. Chapman and J. Hockey. London: Routledge.

Bhatti, Mark, and Andrew Church. 2000. "I Never Promised You a Rose Garden: Gender, Leisure and Home-making." *Leisure Studies,* 19 (3): 183–197.

Bhatti, Mark, and Andrew Church. 2001. "Cultivating Natures: Homes and Gardens in Late Modernity." *Sociology*, 35 (2): 365–383.

Benjamin, Walter. 1992. *The Work of Art in the Age of Mechanical Reproduction*. London: Fontana Press.

Bormann, Herbert, Diana Balmori and Gordon T. Geballe. 1993. *Redesigning the American Lawn: A Search for Environmental Harmony*. New Haven, CT: Yale University Press.

Buttel, F, 1996, Environmental and Resource Sociology: Theoretical Issues and Opportunities for Synthesis, *Rural Sociology,* vol. 61, no.1.

Chevalier, Sophie. 1998. "From Woollen Carpet to Grass Carpet: Bridging House and Garden in an English Suburb." Pp. 47–71 in *Material Cultures: Why Some Things Matter,* ed. D. Miller. London: University College London Press.

Constantine, Stephen. 1981. "Amateur Gardening and Popular Recreation in the 19th and 20thCenturies." *Journal of Social History,* 14 (3): 387–406.

Clarke, Clifford E. 1986. *The American Family Home, 1800-1960.* Chapel Hill: University of North Carolina Press.

Crandell, Gina. 1993. *Nature Pictorialized: 'The View' in Landscape History.* London: John Hopkins University Press.

Feagan, Robert, and Michael Ripmeester. 1991. "Contesting Natural(ized) Lawns: A Geography of Private Green Space in the Niagara Region." *Urban Geography,* 20 (7): 617–634.

Fishman, Robert. 1987. *Bourgeois Utopias: The Rise and Fall of Suburbia.* New York: Basic Books.

Fiske, John, Bob Hodge and Graeme Turner. 1987. *Myths of Oz: Reading Australian Popular Culture.* Sydney: Allen and Unwin.

Foster, J. Bellamy. 1999. "Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology." *American Journal of Sociology,* 105 (2): 366–405.

Foucault, Michel. 1977. *Discipline and Punish: The Birth of Prison.* Middlesex: Penguin Press.

Fulford, Robert. 1998. "The Lawn: North America's Magnificent Obsession." *Azure,* July-August.

Grampp, Chris. 1990. "Social Meanings of Residential Gardens." Pp. 178–183 in *The Meaning of Gardens,* ed. M. Francis and R. T. Hester. Cambridge, Mass.: MIT Press.

Groening, Gert, and Uwe Schneider. 1999. "Design versus Leisure: Social Implications of Functionalist Design Approaches in Urban Private Gardens of the Twentieth Century." Pp. 149–163 in *Leisure/Tourism Geographies: Practices and Geographical Knowledge,* ed. D. Crouch. London: Routledge.

Hayward, Tim. 1994. *Ecological Thought: An Introduction.* Cambridge: Polity Press.

Helmreich, Anne L. 1997. "Re-presenting Nature: Ideology, Art and Science in William Robinson's 'Wild Garden'." Pp. 81–112 in *Nature and Ideology: Natural Garden Design in the Twentieth Century,* ed. J. Wolschke-Bulmahn. Washington, D.C.: Dumbarton Oaks.

Hoyles, Martin. 1991. *The Story of Gardening.* London: Journeyman Press.

Ingels, Jack. 2004. *Landscaping: Principles and Practices.* (6th edition), New York: Thomson: Delmar Learning.

Ingram, Dewayne L. 1982. *Basic Principles of Landscape Design.* University of Florida: IFAS Extension.

Jackson, Kenneth T. 1985. *Crabgrass Frontier: The Suburbanization of the United States.* New York: Oxford University Press.

Jenkins, Virgina. 1994. *The Lawn: A History of an American Obsession.* Washington: Smithsonian Institution Press.

Kaplan, Rachel, and Stephen Kaplan. 1989. *The Experience of Nature: A Psychological Perspective.* New York: Cambridge University Press.

Kleinberg, S. Jay. 1999. "Gendered Space: Housing, Privacy and Domesticity in the Nineteenth Century United States." Pp. 142–161 in *Domestic Space: Reading the Nineteenth Century Interior,* ed. by I. Bryden and J. Floyd. Manchester: Manchester University Press.

Lowen, Sara. 1991. "The Tyranny of the Lawn." *American Heritage,* 42 (5): 45–55.

McCarty, Lambert B., Robert J. Black and Kathleen C. Ruppert, ed. 1995. *Florida Lawn Handbook*. Gainesville: University of Florida, IFAS.

Marx, Karl, and Frederick Engels. 1934. *Selected Correspondence*. London: Lawrence & Wishart.

Marx, Karl. 1975. "Economic and Philosophical Manuscripts (1844)." Pp. 279–400 in *Early Writings.* Harmondsworth: Penguin.

Marx, Karl. 1976. *Capital,* Volume I. Harmondsworth: Penguin.

Murphy, Raymond. 1995. "Sociology as if Nature Did Not Matter: An Ecological Critique." *British Journal of Sociology,* 46 (4): 688–707.

Oliver, Paul Davis, Ian and Bentley, Ian 1981, *Dunroamin: The Suburban Semi and its enemies,* London, Pimlico.

Ravetz, Alison, and Richard Turkington. 1995. *The Place of Home: English Domestic Environment,s 1914-2000.* London: Taylor and Francis.

Robbins, Paul, and Julia Sharp. 2006. "Turfgrass Subjects: The Political Economy of Urban Monoculture." Pp. 110–128 in *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism,* ed. N. Heynen, M. Käika and E. Swyngedouw. London and New York: Routledge.

Rose, Graham. 1983. *The Low Maintenance Garden.* London: Frances Lincoln.

Savage, Mike. 2000. "Walter Benjamin's Urban Thought: A Critical Analysis." Pp. 31–53 in *Thinking Space,* ed. M. Crang and N. Thrift. London: Routledge.

Sennett, Richard. 1992. *The Fall of Public Man* (originally published in 1977). New York: W.W. Norton.

Sharp, Thomas. 1946. *The Anatomy of the Village*. Harmondsworth: Penguin.

Sime, Geoffrey J. 1993. "What Makes a House a Home: The Garden?" Pp. 239–254 in *Housing: Design, Research, Education*, ed. M. Bulos and N. Teymur. Aldershot: Avebury.

Slater, Eamonn. 2007. "Reconstructing 'Nature' as a Picturesque Theme Park: The Colonial Case of Ireland." *Early Popular Visual Culture,* 5 (3): 231–245.

Smith, Neil. 1990. *Unequal Development: Nature, Capital and the Production of Space.* Oxford: Blackwell.

Strong, Roy. 1994. *Successful Small Gardens.* London: Conran Octopus.

Verdi, Laura. 2004. "The Garden and the Scene of Power." *Space & Culture,* 7 (4): 360 –385.

Weigert, Andrew. 1994. "Lawns of Weeds: Status in Opposition to Life." *The American Sociologist*, 25 (1): 80–96.

Whiston Spirn, Anne. 1997. "The Authority of Nature: Conflict and Conclusion in Landscape Architecture." Pp. 249 –261 in *Nature and Ideology: Natural Garden Design in the Twentieth Century,* ed. J. Wolschke-Bulmahn. Washington, D.C.: Dumbarton Oaks.

Wilson, Alexander. 1991. *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez.* Toronto: Between the Lines.