

Speculation and Procurement
Informal practices of buying and selling and their affect on
urban form in Melbourne, Australia

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The intention of this paper is to show the ways in which land ownership, and particularly the boundaries which define it, act as a kind of infrastructure for informal development, affecting (or supporting) specific patterns of subdivision and construction. These patterns are the unintended side effects of the logics of efficiency for individual, private developments. They also have a great affect on our experience of the urban environment – in particular on the arrangement, form, scale and aesthetics of streets and streetscapes.

Through four case studies in the city of Melbourne, Australia, we trace the history of land division within Colonial settlement from the mid 1800's through to the present. We show that in making decisions regarding development of this land, landowners prioritise an internal logic relating to the efficiencies of individual sites over the relationship to the larger city. However, individual logics repeat on sites of similar shape and size, and the accumulation of these occurrences gives rise to larger city-wide patterns of organisation. In the Melbourne context this process is accentuated, firstly by the systematic way in which land was divided by the Colonial government which gives rise to repeating conditions, and secondly by the high levels of land ownership encouraged at every scale and level of society since Colonial settlement.

Based on this idea of boundaries as infrastructure, the paper concludes by suggesting ways in which this type of knowledge could be utilised to inform urban design policy, using land division as a tool to compel particular outcomes from the unintended city. Furthermore, the research also suggests an alternative way for urban design to interact with development which considers the individual site firstly, and in detail. The paper speculates that this input at a local scale could work in combination with a better understanding of the repeating logics of developers, allowing wider aspirations for the city to accumulate through many individual tactical developments over time.

The space between butterflies

The potential for land division and boundaries to affect the streetscape can be described through reference to a common Melbourne building type. A *butterfly* is our term to describe a semi-detached terrace house mirrored over a boundary line to make a 'butterfly' shape. On its own, this composite building (2 small things become 1 large thing) changes the size of form on the streetscape. When more than one butterfly repeat, a composite void is also made – the space between butterflies. This changes not only the scale, but also the rhythm of the streetscape, as well as the relationship of two neighbours to each other.



Figure 1. Left, a 'butterfly' type. Right, the space between butterflies

A butterfly is a small type of 'group' form. In certain places in Melbourne such as Carlton North, whole streetscapes are made up of butterflies, as well as twins (2 of the same thing adjoining) or triplets (3 things become 1) etc. etc. up to the scale of a whole street. Bertram and Halik observed and documented this phenomena in their 2002 book *Division & Multiplication*. Specifically in Melbourne, they write, 'what predominates is a series of distinct groupings or parts. The group is not the same type of entity as, say, an urban block, but it could be a block, or a part of a block, a single building or even part of a building.' They describe the affect of these composite groups on 'spatial character', writing that the 'the rhytm of parts and gaps, creates a new type of urban space, strung across property boundaries and invisible within the abstract repetition of the subdivision' (Bertram & Halik 2002, 24)

When we look at the processes that have brought the ‘butterfly’ type into being, it is not an intentional rule or planned aspiration but rather the side affects of series of logical decisions relating to the efficiencies of developing that particular site. The site is wide enough to divide into two, a structural advantage can be gained through mirroring over a boundary line, an scale of efficiency results in repeating details and materials and so on. It is these decisions relating to the individual logics of a site, but having implications for the wider city, that is the subject under examination here.

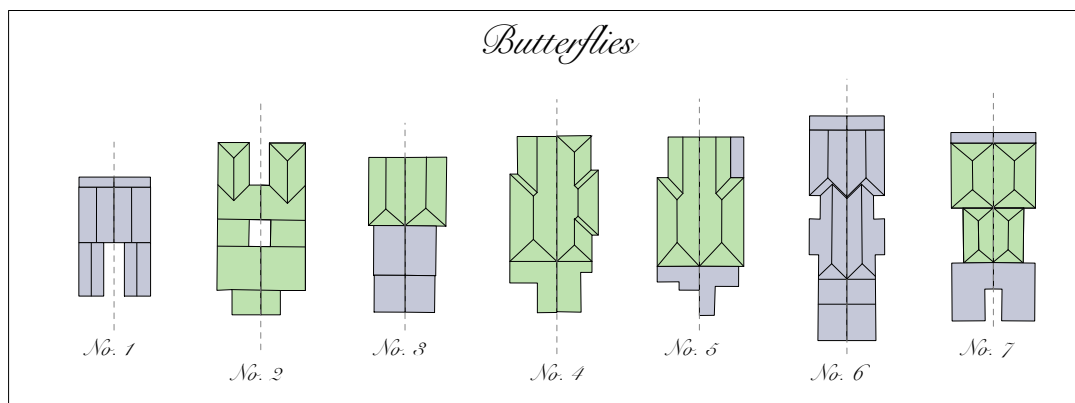


Figure 2. A collection of butterflies from Carlton North.

An informal city based on a consistent underlying structure

Melbourne is a sprawling city with an area of 9,900 km² containing 4 million people, and the largest metropolis and capital city of the State of Victoria in the south of Australia (ABS QuickStats, 2015). Melbourne has been categorised as belonging to a group of colonial ‘lands of recent settlement’ including those of Canada, United States, Australia, New Zealand, South Africa, Argentina and Uruguay (Harris 2010, 1). Some of the characteristics uniting these colonial cities is the development of a capitalist economy unfettered by the feudal or class based restraints, and the lack of reference of the developing cities to the indigenous population. Unlike ‘hybrid’ cities such as Singapore where colonial rules were superimposed onto existing urban and political

structures, in the settlement of Melbourne and other cities in North America, colonialists disregarded the existing patterns and traditions of indigenous land use, 'treating the land as a blank slate to be subdivided and quantified' (Dalrymple et al 2003, 2).

Other early Australian settlements such as Hobart and Sydney were initiated as penal colonies. However in Melbourne it was the unauthorised land claims by free settlers that prompted the official colonisation (Williams 1975, 67). In the early 19th century, 'Squatters' (as they became known) traversed the Bass Strait from Tasmania to make enormous land claims around the site of the future Melbourne. This triggered the now infamous declaration of 'Terra Nullius (land belonging to no-one) that came to have long lasting and devastating affects for the indigenous population. Terra Nullius acted, in the eyes of the Colonial settlers, to 'vest all land in the Crown' (Dalrymple et al 2003, 2) nullifying the squatters claims while at the same time protecting the claims already made by settlers (Boyce 2008, 245). This act required squatters by law to apply to purchase or rent the land from the Crown, recognising the squatters claims to some degree while providing the colonial government with a system for retaining control.

In order to quantify the land, the colonial government began a systematic and comprehensive survey of Victoria, dividing most of the land in a relatively short space of time. As the need for penal colonies decreased, attention was turned to the potential of Australia as a solution to the growing numbers of urban poor in industrial Britain (Williams 1975, 65). The organisational strategy underpinning the survey was one of 'closer settlement' which reflected this new vision for Australia. Closer settlement was designed to break up the Squatters land claims and provide smaller allotments in the proximity of services such as water and towns to be made available for purchase for by immigrants from Britain. Beginning with the squatters and continuing with the Colonial Government's encouragement of land ownership for all, Melbourne has been characterised by the sale and purchase of private land.

In 2012, Tomlinson collected a series of essays under the title 'Australia's Unintended Cities', each one looking at the disjuncture between the aspirations of Strategic Plans and Government policy to the actual outcomes that have arisen in the city over time. Tomlinson expresses the view that 'the housing being built, and the urban form and structure of Australian cities seldom reflect housing and urban policies and plans (Tomlinson 2012, 6). McLoughlin, writing earlier in 1994 documents this disjuncture geographically. Beginning with the first implemented plan, the Melbourne Metropolitan Planning Scheme 1954, McLoughlin overlays consecutive strategic plans with corresponding urban growth, showing that development does not occur in the locations, or to the amounts expected. Other studies look closely at built outcomes in Melbourne suburbs, noting that the majority of development is taking place is not large scale urban renewal project as envisaged in strategic plans, but rather through small scale infill development relating more to the size of land assets and the age of existing housing stock (Khor, Meyer et al, 2012. The 'informal city' of Melbourne documented by Tomlinson and McLoughlin is not a new phenomena, but rather the undisrupted extension of free market conditions that date from Colonial settlement. The study of urbanisation in Melbourne then is in large part the study of the informal speculation, subdivision and construction of private land and buildings.

Four Case Studies with different characters

Although unintended, the outcomes of this informal city are not without order, logic and repetition. Each place exhibits its own version of 'unintended', its own recognisable characteristics in the forms, gaps, streets and details. Inner city suburbs of Melbourne such as Carlton North, South Melbourne, South Yarra and others arose in the frenzied speculator driven development in the 1880's land boom. In these places, the informal outcomes, side effects of speculation and procurement, have become qualities that are recognised, valued and loved. In these suburbs, descriptions such as 'fine grain' or 'human scale' and qualities such as 'adaptability' and 'character' seem to arise effortlessly. Bertram and Halik link 'spatial character' to the patterns created by the

groups of form and gaps described above, noting that ‘that conflict between an incredible variety of interests is inherent in the speculative city, (and) it is composed of these conflicts rather than governed by a single overarching will or agreed direction’ (Bertram & Halik 2002, 13).

These older suburbs are in contrast to other parts of Melbourne including those on the expanding fringe of the city or on large scale infill sites around Melbourne. As noted above, despite the implementation of strategic plans since the 1950’s, research suggests that urbanisation in these newer areas occurs in essentially the same way here as in the inner city suburbs described above; through sporadic and uncoordinated tactical development of individual sites (Tomlinson, 2012 6). The *outcomes* in old and new suburbs however can be entirely different. This can be partly explained through the changes that come about over time to ways of living and taste, changes in construction method or the impacts of transportation logics. But there are other differences which the causes of are not so clear. These include the amount of variation in scale and type of forms in the streetscape, recurring and localised patterns of street logics, and the potential / tendency for adaptation left latent after the first ‘round’ of subdivision. The factors affecting these qualities cannot be understood just by analysing outcomes, but rather are dependant on understanding the processes that brought them into being.

Throughout this paper, four case study suburbs are compared. Three of these examples are taken from the inner and older suburbs of Melbourne; Carlton North, Brunswick and Hawthorn. These are compared with the suburb of Pakenham on Melbourne’s south eastern fringe. Although these suburbs do not present a complete catalogue of urbanisation types in Melbourne, each one seen as a different type of common and typical condition in Melbourne. At the scale of the whole suburb, this means that there are other suburbs which developed in similar ways, and that therefore exhibit similar tendencies in the built environment. At the scale of the individual allotment, this ‘typicalness’ means that the same process of transformation occurred on other similar

allotments, often many times in the same suburb. These outcomes accumulate in specific places at specific times, informing elements of the local character. The selection of these suburbs with characteristics that recur across Melbourne allow the beginnings of a theory that is wider than the individual examples and has relevance to a more broad and basic set of conditions inherent to this city.



Figure 3. A map of Melbourne, showing the location of the four case study suburbs.

With reference to these case studies, common points of the 'speculation + procurement' process are studied and compared. These include the underlying system of land division provided by the Colonial Government; the logics of subdivision for different site types; and the relationship of landowner, builder and end inhabitant to

the land (who outlays the finances, thereby taking the risk). This is done through studying the details provided in historic chains of title records, the overlaying of Crown Surveys and the referral to informal documents such as flyers for land sales. Through the comparison of these examples we can draw out a kind of catalogue of typical responses of the informal city to particular site types. Recurring experiences and visual patterns that we see in the city are clues that reveal both the affect of the invisible survey lines as well as the shared motivations and opportunistic solutions found by individuals encountering similar problems of subdivision and construction. They enable us to see and the wider affect of these 'bottom up orders' on the city, and point to ways in which urban design for newer developing suburbs can learn from informal outcomes of older suburbs.

An consistent and repeating underlying structure

As noted above, the capitalist economy in Melbourne developed without reference to indigenous cultural influences and alternative or historic land ownership structures. At the same time, the comprehensive survey of the land provided a defined set of starting conditions and a coherent structure for the processes of capitalist speculation that ensued. Part of the reason for this consistency is the method of 'systematic survey' utilised in Victoria. This contrasts to Sydney and Hobart, where surveying was first practiced in an isolated survey method in which land was granted before it was surveyed. This led in these places to a discontinuous survey with gaps, usually around undesirable land. In contrast, the survey in Victoria was relatively continuous and carried out with a consistent set of intentional rules, defining a set of scaling land division types and describing a set of procedures for negotiating existing conditions. This set of limited variables is unique to Victoria and provides a useful basis for a method of comparative analysis of urbanisation.

The vision underpinning the strategy of 'closer settlement' was of neatly spaced regional towns surrounded by small farms, an idealistic vision of pre-industrial Britain

(Williams 1975, 71). A basic structure of the survey is a grid orientated true north and consisting of sections of 1 square mile. As a priority, land was to be fully quantified by these sections and then grouped into Parishes, each of roughly 25 sections in size using natural features such as streams as boundaries wherever possible (Brown 1994, 13). Within these parishes, land was allocated for two basic purposes – alienation and reservation. Alienation was the term given to the sale, grant or transfer of Crown land to individuals or organisations through freehold or leasehold titles. Reservation was the term given to land to be retained by the Crown, often to fulfil a necessary public right such as access to water, but also to be set aside for future public and civic functions such as Town and Village centres. Although there were ultimately areas of very harsh landscape in the north-west of Victoria that did not get divided, figure 4 shows the comprehensiveness and consistency of the parish structure across most of Victoria. The landscape of Victoria provides a series of unique versions of the abstract type of the parish, each containing a different realisation of the same division patterns.



Figure 4. Extract from Map of Victoria: showing parishes, Department of Lands and Survey, Melbourne.

The reality of Victoria today is far from that envisaged when the survey was laid out. Allotments intended for farming or rural settlement became part of cities and towns while reserves intended for towns often remained undeveloped, existing only as a set of abstract subdivision on surveying maps. But despite these unintended outcomes and mis-use, the Colonial survey was and continues to be influential to the urbanisation of Victoria. It provides a consistent and uniform approach to the division of land that forms a base condition for all subsequent development - each place, town or city (including the Central Business District of Melbourne) begins from one of a limited catalogue of similar land division structures.

Town, farm, mansion, run

Each parish was planned with at least one area set aside as a Town or Village with surrounding farms of specific sizes. From this strategy come the repeating land division logics of *town* and *farm*, very different in scale and covering many parts of the state. In this study we add to this the *mansion* subdivision, based on the farm logic but with a set of different outcomes, and the *run*, a larger scale of farm which developed as a result of the Pre-emptive Rights (PR) claims by squatters. Each of these four land division logics results in allotments of specific size, orientation and location.

The *town* areas were envisaged to contain functions other than agriculture – religious institutions, schools, shops and industry and anything else required for ‘purpose of public convenience, utility, health or enjoyment’ (Brown, 1994). The surveyors were instructed to locate *towns* these astride a stream where possible and to divide these areas into into small allotments to suit these functions. Allotments were commonly a ¼ acre in size but sometimes smaller. Access to these smaller blocks also required the laying out of public roads. Commonly, streets of 30m wide were planned and laid out on a 230m grid, allowing for street blocks of 200mx200m, or half blocks of 200x100m with a secondary smaller road. The first town to be laid out by Surveyor Robert Hoddle was the area that is now the Central Business District of Melbourne, and this specific grid

Some of the rural areas around Melbourne were settled not as farms but as Mansion estates by wealthy Melbournians. Land division in these areas is similar to that of farming areas – a combination of the square mile grid with long narrow blocks near water, although their proximity to the town centre is reflected in their smaller size. However during the process of subdivision, key differences develop between these mansion estate as compared to subdivided farms. These relate largely to the presence of the pre-existing mansion houses which impact the subdivision size and street layout. This has a distinctive affect on the character of subsequent development and is therefore worth noting as a separate land division logic.

The final and largest land division type discussed in this paper is that of the 'run'. Although the Colonial survey was intended to restrict ownership of large estates, the early Squatters were wealthy and well connected politically and over the course of Victorian history successfully exerted influence in order to retain or increase their land holdings (Williams 1975). These properties were known as 'runs'. They were vastly larger than the small farms instructed under the survey and it was this scale that ensured their ongoing success. In many parts of Victoria, the scale of the small farm holdings was unsuited to the climate and landscape, and often failed to prosper due to lack of water and poor soil conditions (Williams, 1975). On the larger squatting properties, livestock could be 'run' over large areas to access water and other resources as needed and this helped to manage the harsh climate. This economic success not only acted to increase the wealth of their owners, but also acted to ensure that large parts of the Victorian countryside remained undeveloped for most of the 20th century (ref). In the changed context of the later 20th century, the large pastoral estates in proximity to Melbourne became more valuable to be divided and sold for housing. The example property studied here, Heritage Springs Estate in Pakenham, is developed over land that formed part of the Toomah Run, which at one stage covered an area of 13500 acres, 21 square miles or sections (Occupants of Crown land, 1854).



Figure 6 shows the town, farm and mansion land division types compared.

Scale of speculation, and internal 'group' logic

Land to be alienated from the Crown was either simply granted (no money exchanged) or sold at public auction and in either case, settlers could purchase land in single or multiple allotments. Within the 'towns', the smaller allotment size acted like a 'unit'-land could be bought and sold in many different parcels, from the very small (1 allotment) to the medium size (a whole block of around 20 allotments) but there were no continuous properties due to the presence of streets. Speculation was effectively confined to areas within the existing street blocks.

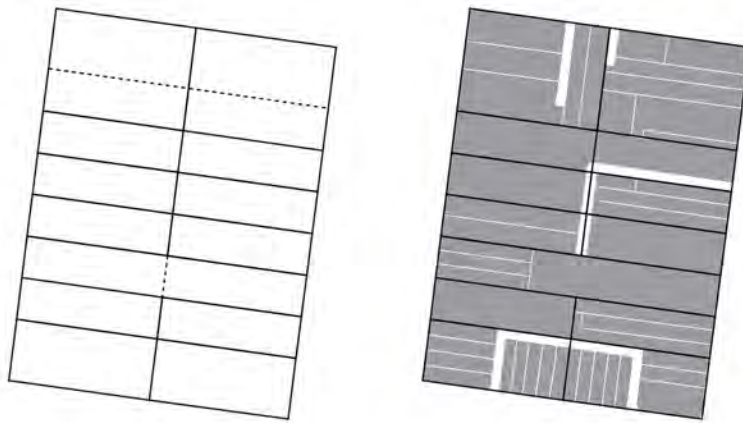


Figure 7. In this Carlton North block, 18 allotments were surveyed. The first land sales resulted in 13 parcels.

When the ownership boundaries resultant from the first land sales are overlaid with the subsequent subdivision the enduring nature of these parcels can be seen. Crown land divisions that define the edges of these parcels remain – divisions within the parcels are often erased and replaced with new, denser subdivisions. Subsequent subdivisions take advantage of the proportions and frontage provided in these 'ownership parcels' and the orientation, size and shape of new small allotments is adjusted accordingly. This logic is internal to each site and shows the development of 'groups' of organisational logic. The example of a 'butterfly', described above is an example of 1 thing divided into 2. In this Carlton North block there are several different group organisations including 1 divided into 9, 2 combined and then divided into 5, and others.

In contrast to its near neighbour Carlton North, the Crown Survey of Brunswick was intended to facilitate rural living and divided into long thin farming allotments abutting either Merri or Moonee Ponds creek. However the land boom of the 1880's, along with the development of the brick industry in this area, resulted in the land being more valuable for subdivision, housing and industry. When speculation occurred it was at a much larger scale than in Carlton North – sometimes a whole farm of one or two square miles was subdivided in the one instance. One implication of this scale was that streets were needed in order to unlock the potential for subdivision. Street layouts were devised and laid out by individuals to suit the needs of their own sites. This can be seen in the example of Jon Guthrie Estate, Crown section 93 in the Parish of Jika Jika. This property is a typical long farming property which had a frontage to Sydney road of 200m and ran 2500m eastwards to Merri Creek. The plan of subdivision shows a street layout that follows a simple and logical pattern relating to these dimensions with long east-west roads running down its centre towards the creek, and small east-west roads as required. discontinuous streets running north - south. The original Crown boundary line is expressed by the backs of blocks. In total the original Crown Section is divided into 442 allotments, showing a scale of subdivision and a size of 'group logic' far greater than Carlton North.

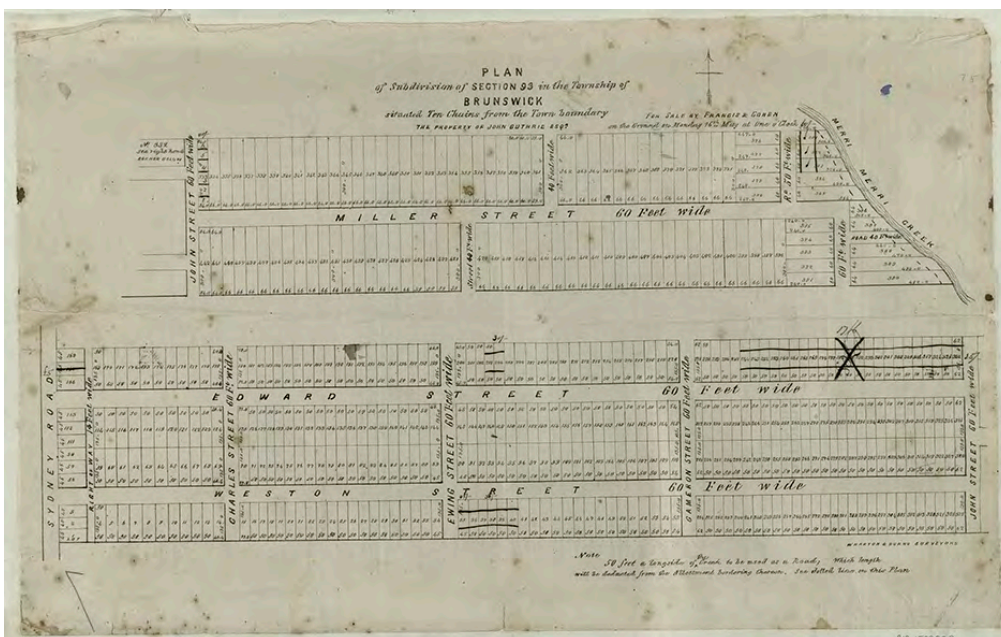


Figure 8. Plan of Subdivision, John Guthrie estate. The long allotment is drawn in two parts to fit on the page.

When original Crown land divisions are overlaid with subsequent subdivision for the whole of Brunswick, we can see again a series of land division patterns in finite 'groups' corresponding to ownership parcels (refer Figure 6). However, unlike Carlton North where the street logic was laid out regularly by a surveyor, only one road (Sydney Road) in Brunswick pre-dates this era of speculative subdivision (Summerton 2010, 32). Groups in Brunswick encompass multiple streets and numerous allotments, acting to affect not only patterns of subdivision but also the experience of circulating through the suburb. The street pattern is orthogonal, but it is not regular. No rhythmic intervals or standard block sizes exist, and street widths similarly vary to suit particular situations. The fabric is more like a patchwork of small discontinuous grids than a overriding system. Strange junctions and adjacencies are common along boundaries as the internal logics meet including several instances where the 'back to front' allotments. These represent the abutment of two 'group logics' of subdivision, where one boundary is expressed fronts of houses and an adjacent one with backs, revealing the original Crown Allotment line with a confused streetscape.

A variation on this condition is illustrated in the suburb of Hawthorn, settled as mansion estates in the late 1800's. When subdivision occurred in these settled areas, mansion estates were often divided into unequal parts – one large part on which the family could continue to reside in the existing house on a reduced grounds, with a series of smaller allotments for sale on the remaining. The allotments for sale were larger than places such as Brunswick, and marketed as 'villa' or 'mansion' sites, with their proximity to known existing mansions a selling point intended to attract the right sort of future resident. Street layout was also affected, as it had to suit access to the existing house as well as to new allotments, refer Figure 6. An example of this is the Kinkora Mansion estate subdivision in Hawthorn. To the east of the estate was a large piece of land noted as remaining in the possession of Mrs O'Brien, and a second house is noted within the subdivision as 'Kinkora House', which the access road dog-legs around. Subdivided mansion estates reflect a similar scale of speculation to farming areas such as Brunswick, with finite 'groups' of land division logic occurring at the scale of a whole

street or small collection of streets. The existence of the mansion houses acted to dilute /amend the logics of efficiency, with larger, as well as varied, allotment sizes and nuanced street layouts.



Figure 9. Flyer for the sale of 'mansion' sites in Hawthorn on the Kinkora Estate. Note the land to the left is set aside for Mrs O'Brien, and one site contains the existing Kinkora House.

In contrast to the small and medium scale of speculation described above, the growing areas of Melbourne reflect subdivision on much larger scale. Pakenham is a suburb on Melbourne's eastern fringe and is part of the Casey Growth Area, rezoned in the 1990's from farming land to residential (DPTLI, 2015). In the last 20 years the Pakenham area has been developed through a series of large housing estates such as Lakeside Pakenham which contains 2800 allotments (Lendlease, 2015) and Heritage Springs which contains 1150 allotments (Parklea, 2015). The history of the area is of farming, including large areas subject to pre-emptive rights claims including as noted above, Heritage Springs Estate, which is developed over land that formed part of the Toomah

Run. Although the boundaries of large pastoral farms such as the Toomah Run have changed over time, the scale of properties in the area remained proportionally large until the 1980's, allowing correspondingly large developments by speculators as land was rezoned. Whole suburbs are formed by a small number of large developments and developers.



Figure 10. Land division in the Pakenham Area. The shaded area is the site of the Heritage Springs development, which is over two square miles for a single 'estate'.

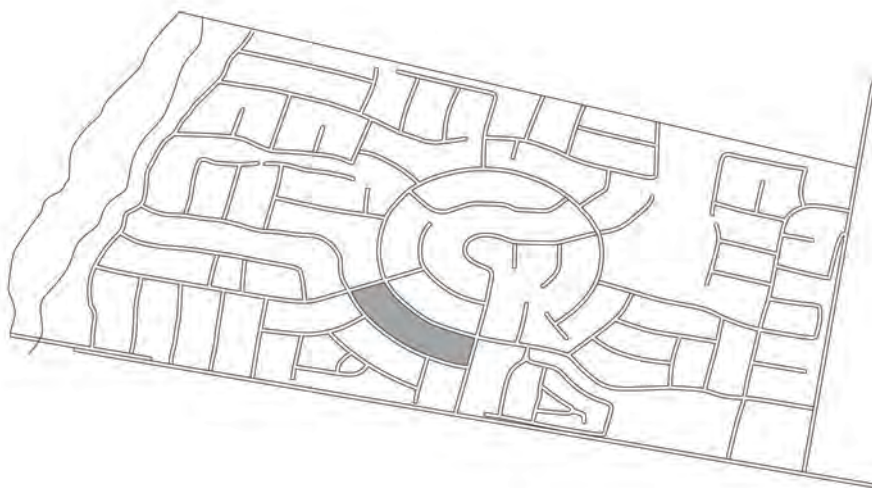


Figure 11. The internal logic of the Heritage Springs cul-de-sac street planning.

There is an obvious difference here to the subdivisions in Brunswick, Hawthorn or Carlton North developed 100 years earlier, between orthogonal and cul-de-sac street planning and this has been discussed in detail elsewhere including comprehensively by Graeme Davidson in *Car Wars*, 2004. But similar to Brunswick, the street layout references an internal logic relating to the immediate boundaries of the estate and logic of subdivision rather than to a greater city logic or suburban plan. When land parcels are overlaid with subsequent subdivision, the internal logic within ownership boundaries is again evident and is perhaps accentuated - parcels are now so large that street layouts within these estates can be complete within themselves, rather than partial as in Brunswick or Hawthorn. Connections to neighbouring developments are not required and are few in number. Unplanned junctions to adjoining estates occur here as they do in Brunswick and Hawthorn, for example streets that simply dead-end at one boundary line and are not continued into the neighbouring estate. However in Pakenham these are reduced in number and hidden by layout - street patterns have large areas of consistency with small areas of inconsistency. Repetition of allotment types is also consistent at a very large scale and this is accentuated by the integration of building procurement, which is discussed in more detail below. The variation in site type, scale or group form that occurs in Carlton North is replaced in Pakenham by the experience of a complete street arrangement, and consistent spacing, type and arrangement of built form.

Accumulated patterns

As shown above, the shape of ownership parcels affects the method by which land is subdivided. Despite developments being uncoordinated, similar site types on which a simple logic of efficiency is applied result in similar subdivision solutions. A single site in Carlton North for example, with street frontage to just one short edge, is most simply and effectively subdivided into several long narrow allotments of the same length. In a corner situation, where properties contain two frontages, subsequent subdivision is more likely to consist an arrangement of shorter blocks which change orientation to the

side street. Through the repetition of these simple logics, we see accumulated patterns at a larger scale. In Carlton North, the north-south streets are characterised by the expression of many small frontages while the east-west streets by long sides sometimes broken by the insertion of a small group of short terraces.



Figure 12. Repetition of the butterfly type in Carlton North.

In Brunswick, as well as Hawthorn, where speculation required the creation of streets, these accumulated patterns also affect layout and circulation. The method of subdivision on the John Guthrie estate shown above is a typical example of the subdivision layouts on long waterfront farms. This same type of subdivision happened on many other similar farm allotments. In Brunswick, and other suburbs originally divided as long water frontage farm properties, this leads to a prevalence of roads running perpendicular to the creeks. In Brunswick there are many long east-west roads and many short discontinuous north-south roads. This greatly affects the experience of navigating the suburb – avoiding Sydney Road when travelling north requires a

particular sequences of twists and turns – an enforced scenic route. It also affects the circulation of traffic, concentrating activity on particular streets and sheltering others, an affect not unlike the cul-de-sac planning of later years.

In Pakenham accumulated patterns are harder to spot. On smaller sites, or on sites with one small dimension, boundaries play a large part in compelling certain subdivision responses. As the scale of site increases relative to the size of allotments and streets, the impact of boundary lines decreases and there are more possible subdivision options. The type of accumulated patterns that affect streets in Brunswick are therefore less likely to occur in areas of large ‘estates’. As well as this, the increased scale of any repeating logics means it is less likely to be recognised as a ‘pattern’ at a human scale.

Procurement methods

We have noted already the existence in Melbourne of ‘groups’ of land division and street logics influenced largely by the underlying systems and patterns of ownership. As buildings are constructed on these allotment, a corresponding affect is generated in the size, spacing and scale of form in the streetscape. The groupings of form however can also be affected by the way buildings are procured and in this paper we are looking at two main types of procurement – through speculative builders and through contract builders.

Speculative builders are those that purchase land, carry out some kind of subdivision or construction on the land, and then sell it on to a final purchaser. This is largely the type of procurement that occurred in Carlton North, Brunswick and in parts of Hawthorn throughout the late 19th century and early 20th century. This type of procurement is largely un-documented but can be studied through title documents. In many instances of builder-speculator procurement, title records show ownership by a individual in the construction industry prior to subdivision, and a mortgage on the land being taken out

soon afterwards. This is the case at 28 Hastings Road in Hawthorn which was purchased in 1885 by Thomas Snooks, a carpenter. A year later two lots are sold and one retained as the Snooks residence. In this case, the owner of the land was also the subdivider and the builder. Each building in this group of three follows the same design with consistent detailing and use of materials. Groups such as these create pattern through solid and void in both plan, section and elevation through the co-location of elements such as lightwells, entrances and services. Despite differences in subdivision patterns, formal groupings in Carlton North, Brunswick and Hawthorn all reflect these small repetitive groups that relate to the prevalence of small speculator builders at this time. This process is inherently risky for the small scale speculative builder as they over extend to built multiple houses at one time and this was demonstrated in the widespread bankruptcy of these practitioners in the 1890's recession (Canon 1966, 168).

In the large tracts of new development happening on the fringes of Melbourne such as Heritage Sprints, a different method of procurement prevails which is commonly referred to as 'house and land' package. Prior to the sale of land in a particular estate, one, or more commonly several, building contractors negotiate to build display homes on typical allotments closest to the entrance. Prospective buyers are then able to visit these 'display homes', selecting a specific site as well as home type. In this method, the risk is limited in scope to the land developer and in costs to the subdivision of land. The builder enters into a fixed contract with a resident to build one house per allotment. Terry Burke links this strategy to the resilience of the Australian building industry in the recent Global Financial Crisis (Burke 2012, 45) but it is also linked with the prevalence of what many see as an unsustainable model for Australian suburbs, increasing sprawl and the issues associated with it. The method of procurement has several implications for built form. The display home model requires each house design to fit on every site, compelling consistency in both. Because each house is procured individually, each one observes setback guidelines and building envelopes – a consistent pattern of form and void develops, eliminating the potential for composite 'groups' seen in other places developed by speculator builders.

Theme and Variation

The four case studies, each representing a recurring type of urban outcome in Melbourne, exhibit difference and repetition to varying degrees and at varying scales. This is shown above to be linked to the ownership groups encountered by developers in different circumstances, and the internal site logics that results. These groups are united by some kind of theme – whether it be similarity of scale and form, the repetition of tectonic detail or the rhythm of void and solid. The presence of this theme is brought to our attention by the simultaneous presence of variation. Each group is different from an adjacent one. Sometimes this difference is radical, but most times it is slight. In music, theme and variation is characterised by a simple melody repeated several times with changes to either its harmony, melody, counterpoint, rhythm, timbre or orchestration or any combination of these (wikipedia_variation, 2015). Similarly, the sameness that we see when several distinct groups are perceived together sets enables us to develop an idea of character – we start to understand *what something is like*.

The scale of these groups relative to human experience is therefore relevant. In Pakenham, both land division and building procurement have happened in large groups. We cannot see or conceptualise the group as a whole entity or compare similarities and differences across multiple groups. Gaps in logic between different ‘estates’ which have the potential to reveal these differences are small in number and hidden in layout. Nor are there gaps in logic between the subdivision layout and the building type due to the management of this process at a larger scale. The overriding characteristic of Pakenham and suburbs with similar histories is of consistently scaled and arranged space and form, with a comprehensive street logic.

Suburbs planned on the ‘hoddle grid’ such as Carlton North, also exhibit a kind of consistency in the orderly layout of wide streets. In these places, a repeating underlying structure reminds us of the city centre, a pattern and scale that is recognisable in some

form, independent of the kind of subsequent development. However, the density of allotments, and therefore the density of separate ownership groups, defies such a consistency of built form. Here, the results of multiple, small scale, uncoordinated speculative builders can be seen. The streetscape is composed of set of distinctive groups, each visually recognisable as a whole, and as separate from its neighbour. An element of disjuncture is also shown between the logic of the subdivision and buildings – types are elongated and narrow reflecting the adaptation of a building type to a site type rather than an integrated fit. This looseness is often the site for future change in these suburbs, with development of ‘mews’ houses onto back laneways.

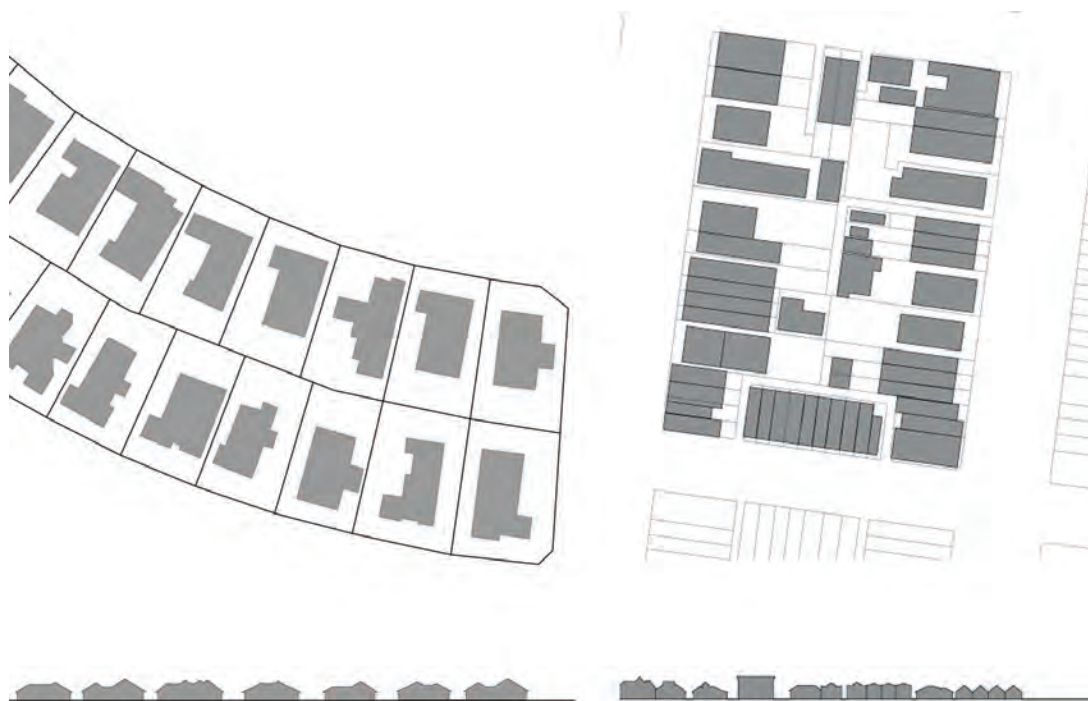


Figure 13. Left, plan and elevation of Pakenham showing equal spacing and size of form. Right, Carlton North showing groups and variation in gaps.

Suburbs such as Brunswick and Hawthorn perhaps exhibit the most amount of variation. The formal ‘groupings’ are present but here it is accentuated, perhaps doubled, by the patchwork of grouped street layout logics. In size, these groups site between Carlton North and Pakenham, still able to be experienced and affecting not only our visual and formal experience but also the way we move from place to place. Gaps in logic between

'estates' are also visible, often marked by the observation of strange phenomena such as 'back to front' houses. In all three older suburbs, the adjacencies of finite groups of arrangements, forms and aesthetics, and the gaps in logic that result, work to bring to our attention both the theme and variation present – 'groups work to manage difference' (Bertram and Halik 2002, 13). This constant judgement between sameness and difference helps to develop a nuanced understanding of the character of individual places.

Towards strategies of specificity and diversity

Despite being informal, development in Melbourne is not inevitable, generic or chaotic. It can be affected by underlying conditions; it follows simple site specific logics of efficiency; it is repetitive and predictable under certain circumstances. Armed with this knowledge, the history of land speculation becomes a valuable resource for understanding why particular built outcomes develop in the 'unintended city'. One of the potentials for this research is the improved interaction of strategic planning and urban design with private development. Urban design could focus its attention on the conditions which we know to affect development. This study points to one of these as being the underlying structure of land division and the shape, size and proportion of boundary lines on which speculative development takes place. Rather than leaving land division to be a result of historical accident, land division could be used as an intentional infrastructure to encourage the development of particular built outcomes.

But we would also like to suggest another way in which research such as this could be used. Based on the knowledge that accumulated patterns emerge from multiple smaller outcomes, designers could study the affect of particular small development types on the wider urban form. In this model, urban design would divide its focus between outcomes for the wider city and the outcomes for specific individual sites, acknowledging and utilising their intrinsic connectedness. It would require urban design to understand and go through the processes carried out by developers and work

upwards and outwards from these towards a strategy for the wider city. It would also involve a departure from the idea (or illusion) of control that underpins urban design tools such as the masterplan. Exact outcomes would be, as now, left to be realised by the accumulation of informal development. Instead of planning the city, urban design would aspire to cultivate particular conditions which were likely to guide the city towards a type of spatial character, relying on and encouraging the diversity and specificity we know can be created by the informal city.

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