THE IMPERIAL IMPRINT: BRITISH COLONIAL TOWNS

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Opsomming

Baie voormalige Britse kolonies soos Australië, Suid-Afrika en die Verenigde State van Amerika, toon merkwaardige ooreenkomste in die uitlê van hul dorpe. Die dorpe word gekenmerk deur 'n rooster-uitleg en soortgelyke uitlegte van eiendomsreg, grondverdeling en eienaarskap. Hierdie referaat se doel is om die basiese elemente en die verskeie aanpassings van die Britse model van dorpsontwikkeling in die kolonies te definieër. Die studie sal fokus op die Britse koloniale vestiging aan die Ooskus van Amerika en Suid-Afrika.

Deur die eeue is die rooster-uitleg sinoniem met verhuisende mense as gevolg van die eenvoud van die uitleg, en gemak van uitbreiding om toekomstige groei tegemoet te kom. Terwyl baie voormalige kolonies ook beïnvloed is deur die Britse Tuinstad (Garden City) en Nuwe Stad (New Town) bewegings, sal hierdie referaat slegs fokus op die vroeë koloniale tydperk en die aanvanklike vestigingspatrone.

Die titel van hierdie referaat verwys nie alleen na die uitleg van die stad nie, maar erken ook dat die uitleg daarvan 'n fisiese uitdrukking is van die politieke, ekonomiese en sosiale instellings. Die imperiale stempel is deurdring met die ideale van privaatbesit, kapitale formasie, investering, rykdom en individualisme, en die stad is derhalwe méér as net 'n patroon van fisiese ontwikkeling.

1. Introduction

The former British Colonies of America and South Africa show remarkable similarities in their town layout, being characterised by grid layouts and similar concepts of land tenure, land division and ownership. The grid (or orthogonal) layout found in these former colonies has become synonymous with migratory people, due to the ease of survey and the layout's ability to expand to meet future growth. This paper seeks to define the basic elements of the British model of town development in the colonies by focussing on the settlements on the east coast of America and South Africa. While many former colonies were influenced by the British Garden City and New Town Movements, this paper will focus exclusively on the early colonial period and the initial settlement patterns. During this period, it is argued, the British military had a fundamental and far reaching impact upon town planning in the colonies.

The city layout is a physical expression of the political, economic and social institutions of a particular historical context, thus the Imperial Imprint imbued the ideals of private ownership, capital formulation, investment, wealth and individualism. British colonial towns differed fundamentally from the existing settlements in the colonies, suggesting that cultural determinants had a greater impact upon town planning than environmental factors.

This paper seeks to analyse the town layout principles during the British colonial period, it tries to define the underlying principles of British colonisation and illustrate the impact these had on the physical form of settlements and indeed on the pattern of human settlement.

2. Historical background

Colonisation profoundly influenced urban form around the world and most cities in less developed countries today still reflect the conflict between European urban form and the indigenous settlement patterns. The creation of European enclaves in the newly colonised territories, as with Roman settlements in conquered lands many centuries before, were designed to develop an urban network, a cultural hegemony, a social make-up and a physical imprint that would be recognisable throughout the colony. As Violich has pointed out, cities were focal points of the decision making process; therefore, controlling them in a social sense was the first step to economic and social continuity for those in power.¹ These considerations were uppermost in the minds of the Spanish colonialists:

The Spanish Kings (and indeed all the colonial powers), aware of the potential wealth and empire building possibilities in the New World, attempted to orchestrate the slow but steady expansion of à settlements in a way that each act of conquest would result in the effective extension of the highly centralised power structure of the Spanish Crown.²

The primary aims of colonisation offer a clue as to the settlement patterns in most colonies. Christopher states that: "In simplistic terms the initial Portuguese thrust into Africa in the fifteenth century provides an answer which is valid for later periods."³ The Portuguese entered Africa with five basic goals. The first was *scientific*; the need to explore the continent with the objective of finding a sea route to India. The second was *commercial*; seeking to open trade within the continent and beyond. The third goal was *military*; to assess the strength of the Moslem enemy and the fourth was to link up with any *Christian* powers to be found. Finally, *missionary* activity was to be directed to the saving of souls."

¹ Violich after Mundigo and Crouch, "The city planning ordinances of the laws of the Indies revisited: Their philosophy and implications," *Town Planning Review*, part 1, 48, 3 (1977), p. 259.

² Mundigo and Crouch, "City planning ordinances", 1, p. 259.

³ A. J. Christopher, Colonial Africa (Canberra, 1984), p. 1.

[own emphasis] These reasons for colonisation are echoed in the Spanish Laws of the Indies, which specify:

...those who are in charge of governing the Indies, whether spiritually or temporally, should inform themselves diligently if within their districts, including lands and provinces bordering them, there is something to be discovered and pacified, of the wealth and quality, of the peoples and nations...⁴

Later in the same laws it is stated: "And they (the regions) should be populated by Indians and Natives to whom we can preach the gospels since this is the principal objective for which we mandate that these discoveries and settlements be made."⁵ It was, however the aspect of commercial gain which came to dominate the enterprise and guide most other European powers wishing to colonise.⁶ Given the commercial nature of many of these colonies, as well as the need to gain access to the newly discovered areas, the primary settlements were mostly ports with stronger links to the colonising country than to the hinterland. The Spanish Laws of the Indies again offer insight on this point: "...according to a centralised system of royal planning which encouraged concentration of wealth and of resources, (each) city was administratively linked directly to the government in Spain, and trade among the New World cities was not encouraged.⁷ This pattern of development was clearly evident during the British rule in the Cape; communications between towns was tenuous and most trade centred around the harbours at Cape Town and Durban. Early British architecture in South Africa also illustrates a strong dependence on imported materials.

3 The pattern of colonial development

3.1 Theoretical base of the study

Dodgshon states that historical geography can gain more from the substantive than from a formalist approach.⁸ By this he means that we should work from the premise that modern concepts of human spatial organisation are inapplicable outside the specific socio-historical context in which they have been formulated, and that we should seek to clarify how the unfolding human landscape records the successive imprint of different systems of spatial order. These systems of spatial order are defined through the variables and interactions which determined the organisation of society in space. Change from one

- ⁵ Mundigo and Crouch, "City planning ordnances", 1, p. 250.
- 6 Christopher, Colonial Africa, p. 2.
- ⁷ Mundigo and Crouch, "City planing ordinances", 1, p. 398.
- ⁸ R.A. Dodoshon. The European past: Social evolution of spatial order (London, 1987).

⁴ Mundigo and Crouch, "City planning ordinances", 1, p. 250.

system to another is taken to mean a qualitative change in the nature of the system, a change which could involve different levels or spheres of determination, control mechanisms or goals and, in consequence, effects. It is therefore, necessary to understand the political, economic and social aspects of a settlement in order to fully understand the pattern of development. Stated differently, the spatial structure of a settlement is the physical manifestation of the social structure, economy, religion, technology and function of that settlement.⁹

Bohannan's theory argues that man manipulates and changes the environment instead of merely exploiting it.¹⁰ His aim is not mere survival or even comfortable survival, since man has introduced the illusion that he controls his environment. Within the last ten to fifteen thousand years, human culture has vastly reduced the part that raw nature plays in creating the immediate environment of human beings. The geographical environment, in other words, is replaced with the cultural and social environment; more complex cultures limit the degree to which man is dependent on the natural aspects of the environment. From Bohannan's theory one can assume that urban landscapes, although sometimes adapted to better fit the environment, are essentially determined by the culture of the people who created them. Dodgshon adds the concept of understanding the culture of people at a given point in history, as modern interpretations of culture often lead to incorrect interpretations and notions of human spatial organisation.¹¹

3.2 Social underpinnings

Colonisation was often seen as an outlet for surplus populations. The British used colonisation as a tried and trusted method of relieving overpopulation at home, as the Greeks had done long before. One of the great arguments endorsing colonisation in late Elizabethan and Early Stuart times was the need to relieve social pressure in England. It was no coincidence that the Elizabethan Poor Law and the foundation of Ulster and Virginia belonged to the same decade. The next spate of emigration from Britain occurred shortly after the Napoleonic Wars. The idea of finding outlets for surplus populations, however, really took off in the scramble for colonies that occurred during the late nineteenth century.¹²

The colonies also played a vital role in the provision of openings, official and otherwise, for ambitious citizens of the metropolis. Colonies have long been regarded as safety-valves for the energies of the younger sons and daughters, especially of the upper

- ¹⁰ Bohannan, Social anthropology, p. 211.
- ¹¹ Dodgshon, European past, p. 5.
- 12 E. A. Walker, Colonies (Cambridge 1944).

⁹ P. J. Bohannan, Social anthropology (USA, 1963).

and middle classes. With the direct inheritance system in operation in large parts of Europe, only the eldest son of nobility was ensured a title and the wealth of the family estate; colonies offered the other children a possibility of acquiring a decent living and the rank to which they were accustomed. These people formed the core of the officers and administrators in the colonies. In the Laws of the Indies it is specified that all the original settlers in a colonial town would obtain a title, in this case it afforded people with no rank an opportunity to acquire a title of distinction.¹³

The establishment of colonial towns was also important in terms of the relations between the colonialists and the local population. Colonial towns aimed at portraying a distinctly European imprint which would set them apart from the local settlements. There is little question that one of the primary aims of colonisation was to impart European culture on the newly colonised world. In the case of Spanish colonisation one of the primary objectives was to convert the natives to Catholicism, it was thus, necessary to establish towns in areas already inhabited by locals. This consideration had a direct influence on the layout of the town;

...the ideal town scape that the Spaniard was being ordered to build in the New World added the necessary physical dimension and reinforcement to the more subtle activities of Indian conversion to Catholicism. There was no building of more influence and designed to impress the natives more deeply than the main cathedral, which was to be built according to precise specifications which would result in it acquiring more authority.¹⁴

British colonial settlements were somewhat different, being established at a later time, they came after the Renaissance and the break down of centralised religious control. British towns were home to a variety of denominations of Christianity and hence seldom accorded any one church with a dominant central location. British towns by contrast tend to have administrative centres.

The establishment of colonial towns was important from an administrative point of view as Owen's notes of Roman times: "colonies were established both for military security and, in areas without traditions of urban life, to introduce and familiarise the provincials with law-abiding government." ¹⁵

Another interesting phenomenon of colonial towns was the dual nature of settlements. Most colonial settlements were kept separate from the settlements of the local inhabitants and integration of the different cultural groups did not take place. Mundigo and Crouch

- ¹⁴ Mundigo and Crouch, "City planing ordinances", 1.
- ¹⁵ E. J Owens, The city in the Greek and Roman world (London and New York, 1992), p. 124.

¹³ Mundigo and Crouch, " City planning ordinances", 1.

note that in Lima in 1553 a separate settlement for Indians, with smaller buildings and narrower streets, was provided.¹⁶

3.3 Economic influences

The discoveries and expansion of Europe had practical consequences in terms of trade and conquest. Every colony or trading centre was a new economic stimulus. America for example provided an immense market for European manufactures and agricultural products. American bullion increased the supply of money circulating in Europe and intensified existing economic and social developments.¹⁷ With wealth goes power and prestige for both the colony and the colonising power.

The enhanced economic status of the colony had a profound effect upon colonial settlements, for ties with the colonial metropolis became more pervasive, and hence the European influence remained a powerful determinant in the physical design of settlements. Settlements were commercial and administrative centres; their location was thus often dictated by economic and military advantage. Towns tended to be located at natural harbours, fording points, on trade routes or in regions with abundant natural resources.

British colonisation went hand in hand with mineral exploration and extraction as well as the search for raw materials such as timber and food for the European market.

The capitalist principles of the colonising power largely dictated the layout of the towns. As Bohannan explains: "...even when land is not scarce for means of production, there tends to be another matter that makes people value it and demarcate it. That is its value as a site."¹⁸

In Western society land fulfils two purposes:

- 1. Land is a necessary dimension of society because human beings need territory.
- 2. Land is valued for what it can produce and therefore, it enters the market as a factor of production.

It is usual for the two aspects of land occupation - production and site to go together. It is also usual for the dominant one to be the site aspect. One exploits that land on which one finds oneself as a member of a localised social group. Only in a contract society, where land enters the market, do we have the opposite situation, in which local groups come into existence

¹⁶ Mundigo and Crouch, "City planning ordinances", 1, p. 399.

¹⁷ D. K. Fieldhouse, The colonial empires (London, 1966), p. 4.

¹⁸ Bohannan, Social anthropology, p. 222.

because land has been parcelled out in certain ways in order to maximise production, and then sold. $^{\rm 19}$

Bohannan goes on to explain that every social group possesses some view or opinion about the physical milieu in which it find itself- what he calls 'folk-geography'. He reasons that for the past few centuries Westerners have viewed the world as a sphere covered with a grid. The grid can be manipulated in size and scale from the size of the earth to the size of a classroom globe. The grid can even be reduced to a two dimensional map.²⁰

Thus, culturally, land - whatever else it may be is a measurable entity divisible into 'thing like' parcels by means of the mathematical and technical processes of surveying and cartography. This complex notion of land, with its accompanying technology, is an absolute essential to the western system of land tenure. Legally recognised rights can be held in such a parcel of land and these rights can be sold or exchanged for money at a market price.²¹

Even in the Colonies where land was not scarce it was still divided and allocated in terms of the western notion of land.

Even as late as the colonial settlement at the Cape (1652), Holland and England used a curvilinear method of survey, which was related to the natural and cultural (artificial) features found existing on the ground. When countries were newly colonised, cultural and natural features were few and far between, thus, the beaconed rectilinear boundary system of ancient Egypt was adopted. The grid layout was the easiest layout available which could be replicated in all the colonies, which suited the notion of the division and ownership of land and which was within the technical surveying abilities of the era.

3.4 Political influences

The meaning and implications of the word "colonialism" and of the closely connected terms "empire" and "imperialism" have undergone a profound transformation in recent times. Until the end of the nineteenth century the words "empire" and "imperialism" were generally used in laudatory and not pejorative terms.²² Walker lists prestige as a major political motive for establishing colonies, "...if Spain and Portugal had colonies, it behoved

- ²⁰ Bohannan, Social anthropology, pp. 223-224.
- ²¹ Bohannan, Social anthropology, p. 224.
- ²² R. Strausz-Hupé and H.W. Hazard, The idea of colonialism (London, 1958).

¹⁹ Bohannan, Social anthropology, p. 223

other powers to have colonies also.^{#23} Political influences can also be traced to the desire to expand the host countries citizenry, expand their markets and to protect markets and trade routes. All of these aspects had a bearing on the physical layout of colonial towns, they were planned to guard major harbours, defend sea routes and offer access to the raw materials and resources of the colonies.

Most British colonial towns were predicated upon a European concept of the powers of municipal government derived from the development of the free town and the charter city during the Middle Ages. Such communities were municipal corporations of considerable authority typically capable of owning and disposing of all vacant land in the city, of holding monopolies on certain aspects of trade and of approving or disapproving physical changes to the city. They were generally authorised to play a leading role in guiding and directing the physical form of the community as well as its social and economic policies.²⁴

3.5 Military influences

Despite their divergent national origins, the various groups involved in the colonisation process each acted with some degree of international cohesion. The politicians, most of whom never visited the colonies, drew the boundaries. The military carried out the conquests and frequently chose the ports from which to control the population. The military also often formed the first colonial governments as coercion was an essential part of the maintenance of colonial administration.²⁵

Indeed the demarcation between soldier and administrator in the colonies was rarely defined. The administrators determined the pattern of urban settlement by selecting the administrative posts and deciding upon the nature of the administrative regime.²⁶

Many British colonial towns were laid out by the administrators; most of whom came from the military, thus, in essence it can be argued that the Royal Engineers were intimately involved in the design and layout of colonial towns. Whithworth Porter²⁷ in his study of the Royal Engineers states that Modern Engineering emerged in the military in the form of the sappers, "a body of experts who made it their profession to supply the scientific

- 23 Walker, Colonies, p. 28.
- 24 Greckens, p. 22.
- ²⁵ Christopher, Colonial Africa.
- ²⁶ Christopher, Colonial Africa, p. 3.
- ²⁷ Whitworth Porter, *History of the corps of the Royal Engineers*, 1 (London, 1889).

needs of an army."²⁸ Civil Engineering emerged as all non-military engineering and occurred primarily due to the large number of Royal Engineers who were co-opted into the public sector.

If one considers the description of what a Principal Engineer was supposed to know, it is evident that the Royal Engineers obtained training in a what today would fall into the disciplines of Architects, Engineers, Land Surveyors and Planners:

He ought to be well skilled in all parts of the mathematics, more particularly in Stereometry, Altimetry, and in Geodesia, to take the distances, heights, depths, surveys of land, measure of solid bodies, and to cut any part of ground to a portion given, to be well skilled in all manner of foundations, in the scantlings of all timber and stone and of their several natures, and to be perfect in Architecture, civil and military ...²⁹

It is the contention of this paper that the British military has had a fundamental and far reaching impact upon the planning of their colonies.

The role of the military in the planning of colonial settlements was well documented in Ancient Roman times. At its height the Roman Empire was vast and contained a variety of peoples of different cultures, beliefs and traditions; Rome was faced with major problems both in governing this immense area and in maintaining peace and security within it. In order to achieve these aims the central government relied heavily upon the city. Cities were the primary level of administration in the empire. The Romans believed the city to be the institution most capable of maintaining peace and promoting civilisation in the Roman sense.

The result was that Romanised towns, usually laid out in the typical grid fashion, and including typical Roman urban buildings sprang up. The military surveyor and the engineer played a major role in the construction of these new cities.³⁰

The Roman influence on the sixteenth century colonial efforts can be traced directly to the Spanish laws of the Indies. The Spanish government relied heavily on the writing of Vitruvius. The manuscript of his Ten Books on Architecture had been rediscovered in the previous century and published by Alberti. When Vitruvius wrote his prescriptions, the Roman Empire had been founding colonial towns for at least three centuries, and their

³⁰ Porter. Idea of Colonialism, p. 123.

²⁸ Porter, Corps of Royal Engineers, 1, p. 8

²⁹ Whitworth Porter, Idea of Colonialism, p. 49.

theories had been based on the Greek experience going back at least to the seventh century BC.³¹

Mundigo and Crouch claim that the Ordinances issued by Philip II for the laying out of new towns were based directly on these works.³² They further state that the Spanish ordinances have remained largely unknown to the English speaking world; the only translations dating 1921 and 1922. It is however, highly possible that the laws of the Indies were known to the British military long before this, even if they were not freely available, the direct impact which Roman colonial planning had on Britain can not be dismissed.

The Spanish Laws of the Indies specify a Grid layout with regular plots. Although there is no obvious British equivalent of the Laws of the Indies it is the contention of this paper that a very similar philosophy was used by the British. The Spanish Laws of the Indies are described by Mundigo and Crouch as a "practical 'how to' manual" designed to guide untrained city builders in laying out a new settlement. By contrast, the British colonial towns were laid out mainly by the Royal Engineers, it is thus, possible that the grid layout was the layout to which they were accustomed because of their standardised training in land surveying and civic design.

This argument is supported by J. de Villiers in his book on "The Cape Regiment, 1806-1817".³³ He states that there were two training centres for junior officers in those times (1801) one at Woolwich and the other at Sandhurst. Woolwich offered outstanding training in artillery and engineering. By 1815 the Board of Ordinance was one of 13 major departments in the British Army. Under this department fell the Royal Artillery and the Royal Engineers; therefore, the Ordinance Office through the Secretary of State for Colonies and War, had a major impact on the development of fortifications and other building projects in the Colonies. The scale and range of developmental projects which the Ordinance Department became involved with lead to the lobbyists for the re-structuring of military training to propose that the course be divided into civil and military engineering. This indicates the extent of non-military work which was being handled by the Royal Engineers in the Colonies.³⁴ In fact, De Villiers states:

³² Mundigo an Crouch, "Three American cities", p. 248.

³¹ Mundigo and Crouch, "The city planning ordinances of the laws of the Indies revisited: Three American cities", *Town Planning Review*, part 2, 48, 3 (1977), pp. 397-418, 400.

³³ J. de Villiers, "Die Cape Regiment, 1806-1817. 'n Koloniale regiment in Britse diens", Archives Year Book for South African History, 52, I (1989), p. 20.

³⁴ De Villiers, "Cape Regiment", pp. 21-22.

...tog was daar ook positiewe ontwikkelinge in die Britse leër van die eerste dekades van die negentiende eeu. Die belangrikste aspek is die veelsydige bydraes wat die leër tot die algemene vooruitgang van die verskeie Britse koloniale gebiede gemaak het, waarvan Kanada en die Kaapkolonie maar twee voorbeelde was.³⁵

The Royal Engineers carried out the ordinance survey of South Africa which still forms the basis of the land registration system of South Africa.

4 Spatial development / Case studies

Most early British colonial settlements have a formal grid layout. A number of early American towns, for example Philadelphia and Savannah, have clearly structured orthogonal layouts.

City planning in the American colonies may have had its beginnings in the seventeenth century fortress-villages (Bastides), which were often surrounded by land farmed on a communal basis. Early colonial settlements that were pre-planned with regard to their physical form commonly used a grid street system laid out on a scale appropriate to the number of inhabitants.³⁶

The medieval bastidal plans of France appear to have been the most common amongst American cities in the late eighteenth century. These plans were, however, to be taken over by the 'speculator's town'. Philadelphia's grid plan was characteristic of this open, democratic cadastre, which was so adaptable to the spread along mercantile alignments throughout the interior of the English colonies.³⁷ Reps notes that nearly all American town plans were speculative in their origins.³⁸ Related to this is the almost universal use of the grid-iron principle for urban planning. Grids offered simplicity in land surveying, recording and subsequent ownership transfer. The grid also allows for a remarkable neutrality towards the positioning of specific urban structures. Furthermore, grids favoured

³⁵ De Villiers, "Cape Regiment", p. 23. Own translation: "there were also positive developments in the British army of the first decades of the nineteenth century. The most important aspect is the multi-faceted contributions which the army made to the general development of various British Colonies; the Cape Colony and Canada being two examples.

³⁶ M.P. Conzen, "Town planning analysis in an American setting: Cadastral processes in Boston and Omaha, 1630-1930" in T.R. Slater (ed.) *The built form of Western cities* (Leicester and London, 1990), p. 144.

³⁷ Conzen, "Town Plan analysis", p. 145.

³⁸ J.W. Reps, The making of urban America: A history of city planning in the United States, (Princeton, 1965).

a fundamental democracy in property market participation. This did not mean that individual wealth could not appropriate considerable urban property, but rather that the basic initial geometry of land parcels bespoke a simple egalitarianism.³⁹ Philadelphia (1682), Detroit (1700), New Orleans (1718) and Savannah (1733) all had basic grid layouts. During the latter half of the seventeenth century these colonial cities were quite small in population and accommodated few specialised land use activities in the modern sense.

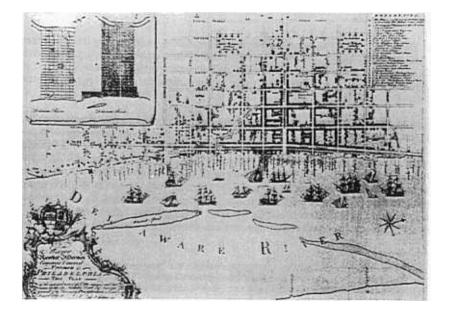


Figure 1: Philadelphia, 1762 (J. W. Reps, The making of urban America, p.168)

³⁹ Conzen, "Town plan analysis", p. 146.

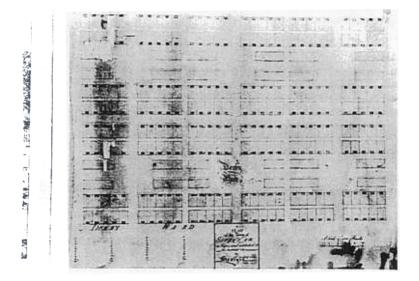


Figure. 2: Savannah, 1740 (Reps, Making of urban America, p.191)

In South Africa the British, upon acquisition of the Cape colony from the Dutch East India Company, immediately felt the need for greater control over the isolated frontier settlers and consequently established a number of commercial and administrative centres. Although a number of subtle differences are evident in their layout they all share the common grid layout, with centrally placed administrative structures and little further distinction in the way of land use. The churches tended to be located on the outskirts of town.

Early British settler towns in South Africa were additions to the original Dutch Settlements, such as Cape Town and Grahamstown. The British however, immediately saw the need to establish new settlements on the eastern frontier in order to exert control over the frontier population. A number of administrative settlements were thus, established. For the purposes of this paper, examples of British settlements in Natal have been looked at in order to illustrate the common characteristics.

4.1 Richmond

Richmond was laid out in 1850 in order to serve the needs of an agricultural community on the banks of the Illovo River. The town plan is a formal grid layout with sixty-six blocks of six acres each, subdivided into twelve half acre plots. The streets were named after royalty and colonial officials. By September 1850 the town could already boast three stores and shortly thereafter a number of sports grounds. This was a fundamentally different pattern form the early Dutch settlements in South Africa which were agricultural and religious centres with no permanent commercial activity.

4.2 Estcourt

Estcourt originated in 1847 as an inn and ferry point on the fording point of the Bushman's River. Being a strategic location, a cavalry detachment soon established a post there. In 1849 additional settlers arrived under the sponsorship of Thomas Estcourt (a member of the British Parliament). Ten years later the seat of the magistracy for Weenen County was moved to the town. The formal grid plan of the town was added to the original settlement in 1863.⁴⁰

4.3 Pietermaritzburg

Pietermaritzburg is an interesting case study, in that it started as a Voortrekker (Afrikaans)town and was later taken over by the British. At the time of occupation the town was described by Colenso as "... long white town" but by the 1920's it had changed to

⁴⁰ R. F. Haswell, *An historic townscapes conservation scheme for Natal*, Natal Town and Regional planning Commission report, vol 61, (1984), pp. 28-41.

"...sleepy red-bricked town".⁴¹ The change in character came about due to the change of occupant. The original settlers, the Voortrekkers, established a course grain grid with long wide roads and fewer and narrower cross roads. The erven were large as the residents practised subsistence agriculture. The houses lined the street and were built of wattle and daub in the Cape-Dutch vernacular. Once the British took over the town they immediately altered the plot sizes through subdivision and introduced more cross roads. The primary reason for the difference being the commercial nature of the British town as opposed to the subsistence nature of the Afrikaner settlement. The Afrikaner houses were demolished to give way to the double storey brick homes of the British. The British houses were decorated with filigree work and other finishes such as pressed steel ceilings imported from Britain.

4.4 Grahamstown

Grahamstown, established as a frontier town in the Eastern Cape, illustrates the military impact on an existing hamlet. The town was at the time of British annexation of the Cape an incipient town, or what the Afrikaners called a "rydorp" (row town- a single street lined with houses). Circa 1814 a British military settlement was superimposed on the hamlet. The odd alignment is still evident in the town centre today.

British colonial town planning definitely follows a trend, as Hoskins eloquently says:

... there are so many towns to be seen and each ought to be approached on foot: certainly all the smaller towns. For only on foot does one detect the subtle rise and fall of the ground to which the earliest settlers were so sensitive, or alignments in the town scene that may throw light on some fundamental change of plan: or the names of streets that set the mind working at once. It would be an interminable occupation were it not for the fact that what one learns about the landscape of one town often throws a flash of light upon a puzzle in another. A pattern begins to form.⁴²

The British towns were characterised by a grid layout, with small square plots and commercial activity. Generally the administrative buildings or cricket ground formed the centre of the town and churches tended to be built on the outskirts of town with associated grave yards. This was fundamentally different from the Dutch settlements which grew around a centrally located church. The locality of the town was also crucial; the towns were commercially based and thus, commanded strategic trade locations such as drift sites, entrances to mountain passes, ports as well as sites of military significance.

⁴¹ Haswell, *Historic townscapes*, p. 45.

⁴² Haswell, Historic townscapes , p. 40.

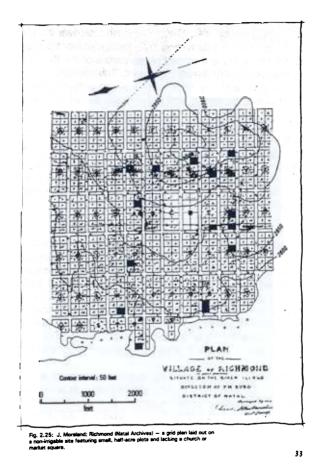
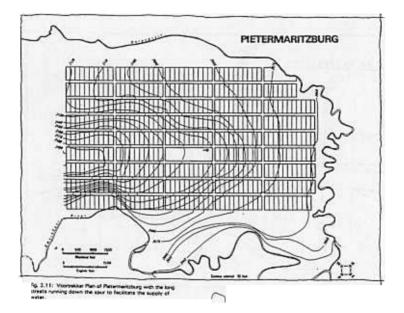
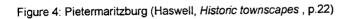


Figure 3: Richmond (R. F. Haswell, An historic townscapes conservation scheme for Natal, p.33)





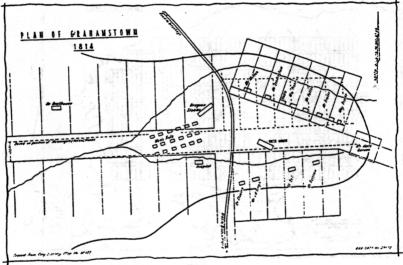


Fig. 2.9: Grahamstown, 1814 (Cory Museum) - military structures superimposed on a rydorp.

Figure 5: Grahamstown 1814 - military structures superimposed on a rydorp (Haswell, *Historic townscapes*, p.20.

5. Conclusion

Colonial expansion and the establishment of colonial towns was about control and prestige. The expansion of European ideas and settlement forms into America and Africa fundamentally altered the relationship between man and environment. Colonisation lead to the extraction of raw materials on a large scale, the introduction of commercial centres and the opening up of trade routes. The areas had previously been inhabited by largely pastoral groups and trade routes had been limited, whereas the new order linked the colonies to the European markets and hence to their direct influence. The establishment of settlements was seen to be necessary not only as a means of exploiting the regions, but also for military purposes. The introduction of European settlements fundamentally altered the existing trade patterns, the European settlements were related to local settlements but retained separate European strong-holds which cornered the market and thus, forced the locals into a servile position.

It is the contention of this paper that the British colonial towns tend to be characterised by a grid layout due to the political, economic, social and imperial influences. The layout has its origins in military control and administration. It is a pattern which has been used repeatedly for colonial expansion as it is not only easy to survey and adapt to different environments, but it represents a the formality needed in order to mark the colonial settlements as different form the local settlements. The cities offered a form of administrative control over the local population; all trade occurred through the cities and they were the centres from which missionary work was carried out. A major contention of this paper is that the Royal Engineers played a fundamental role in the planning and establishment of colonial towns. The town's location was of strategic importance, both in terms of trade and to afford the military administrative control over the region.