

Between the Reds and the Greens: a Geographical Interpretation of the Land Question in South Africa

Roddy Fox – Rhodes University

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My lecture this evening will consist of two inter-linked components. It is conventional on occasions such as this to highlight the salient aspects of your career which led to both your academic interests and career path. In my own case I will start with an examination of my development as a rather unconventional scholar and then follow this with one of my major research interests: a geographical analysis of the land question in South Africa with particular reference to the experience of both Zimbabwe and Kenya. Before the two main sections of my lecture, however, comes a short prologue containing some of its underpinning concepts.

Prologue

The first task any presenter of an inaugural faces is how to get the audience to remember what the lecture is about. I turned to a little psychological and educational theory concerning our memories to help me (Atherton 2002) and discovered that we know a good deal about the delimitation and working of the three different parts of our memories.

The first part is your sensory memory which deals with immediate sensory input and usually lasts for a second or thereabouts. The second part is your working memory and this is the part I have to be particularly mindful about. Here you can accommodate seven (plus or minus one or two) ‘chunks’ of information for a period of up to 30 seconds. This tells me that only a limited amount of complexity can be handled by my audience, especially if most of them are unfamiliar with what I am going to be talking about. So any theoretical constructs which I want to present to you will have to be rendered as simply as is feasible. Once information has been digested by your working memory it gets stored in your long term memory for up to a lifetime. Further reprocessing occurs if I can get you to recall understanding back from long-term to your short-term memory and then work further in your short-term memory. Repeating this process is likely to lead to deep learning. With these comments in mind you should now be prepared for a lecture with some theoretical insight where the constructs developed are used to amplify or build on each other.

The teaching techniques I will use in today’s lecture will be visual and verbal. Two thousand five hundred years ago the ancient Chinese philosopher Confucius asserted that: “I hear and I forget, I see and I remember, I do and I understand.” (North Carolina State University 2003). It would be nice to get you, the audience, engaged with some active learning tonight so as to encourage understanding through doing but that maybe problematic for this type of lecture. Instead I will rely on what I hope will be a lively, visual presentation since this has been shown to be a highly effective learning mode. In the words of Felder and Soloman (2002):“Everyone learns more when information is presented both visually and verbally.” This is because most of us are visual learners though all of us practice these two learning styles at some time.

The third, and certainly the most important concept underpinning this lecture, is that of scholarship and here I will be using the work of the late Ernest Boyer (1990). Boyer and his colleagues undertook two highly respected and critical surveys of tertiary education in the USA in the 1990s for the Carnegie Foundation. In the first of these surveys (Boyer 1990) he gives an historical appreciation of the four functions of the scholar so that we can understand the need to strengthen and redefine the position of teaching in scholarly activity.

Figure 1 portrays the four types of scholarly activity (discovery, application, integration, teaching) overlain above the two sections of this lecture . What, then, are the four scholarly functions?

1. Discovery is the function most people today would recognize immediately since it is our research. Here the scholar is trying to answer the questions: what is to be known, what is yet to be found? Discovery doesn’t operate in isolation but is fundamentally linked to the other three components.
2. Integration is critical since it is the activity of integration which shows us what the discoveries mean in their intellectual and academic context.

3. Application is also readily understood since it is concerned with how discoveries and knowledge can be applied to consequential problems. There is an interesting corollary to this, however, and one which is probably less well known: is it possible for social problems themselves to define the scholarly agenda?
4. Teaching is the key scholarly activity in Boyer's view since our work of discovery, integration and application is only of consequence if it is understood by others. Our scholarly activities, therefore, need to be communicated clearly.

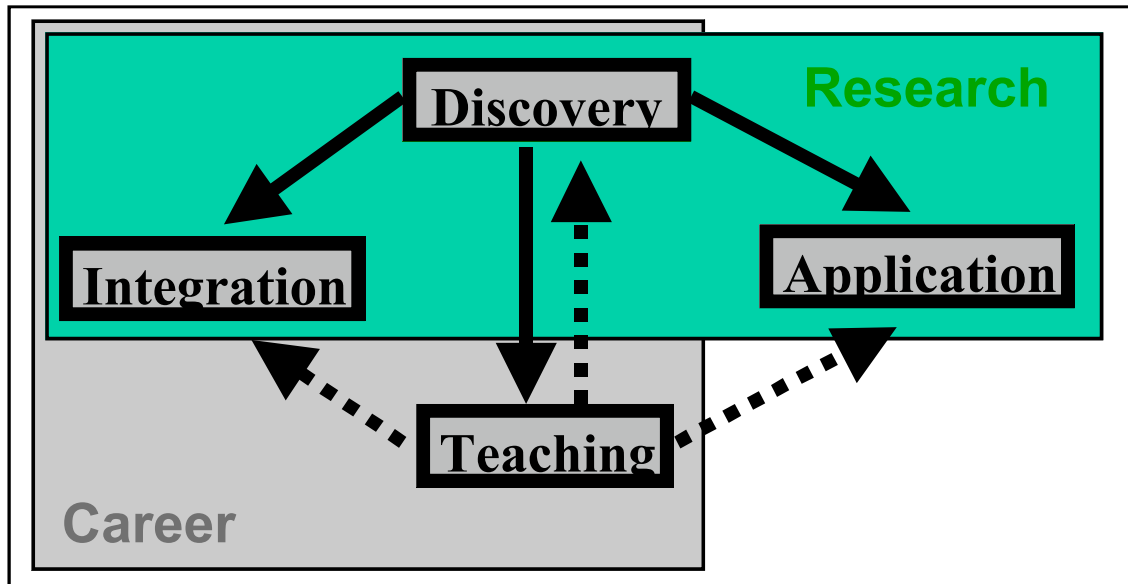


Figure 1 Boyer's Four Types of Scholarly Activity Applied to this Lecture

The next section of the lecture will focus on my career and is a reflection about the route I took towards embarking on a process of discovery, integration and teaching. The third portion of the lecture is concerned with my research activities and centers around a different triangle of scholarly functions: discovery, integration and application. Finally, and following the Dutch tradition, my lecture will end with a dedication.

Career reflection: how did I get here?

I think it is fair to say that there is a 'standard route' to your Professorship, one that is presented to the audience at the start of inaugurals and it runs something like this:

- Gifted child goes to good school;
- Proceeds through schooling to top flight University where he/she gains distinction/s;
- Studies for PhD as apprentice to renowned researcher, graduates *cum laude*;
- Embarks on distinguished lecturing career;
- 'Sees the light' and joins Rhodes University;
- The Academic Planning and Staffing Committee 'sees the light' and promotes to Professor.

Some of my colleagues have seen an earlier version of this lecture and told me that there are shorter routes to a Professorship at Rhodes, but I think this is a fair approximation. My own career shows some similarities with the 'standard route' but also a significant number of differences, some of which can be understood in terms of the sort of learner which I was.

I certainly did go to a good school, though I was not particularly aware of at the time. I sat my '11 plus' examination in 1962 as the son of an expatriate Yorkshire family living in 'the South'. It is important to note here that to Yorkshire people anyone living in 'the South' is automatically inferior. I passed the examination and so I embarked on schooling designed to send me on to a professional or business career. The school I went to was King Edward VI School for Boys in Stratford-upon-Avon, Warwickshire, known locally as 'Shakespeare's School', which is celebrating the 450th anniversary of its founding charter this year. The school had, and still has, an excellent academic reputation. William Shakespeare is virtually the most illustrious alumnus anyone could hope to have but there were other national heroes in the school's roll of honour

such as Great War hero Rex Warneford. Everyone knows of William Shakespeare but Rex is less well known nearly a century after he attended the school. The school's website has the following to say about him:

"Rex Warneford attended King Edward VI School between 1902 and 1904. At the outbreak of the First World War, he volunteered for service in the Royal Naval Air Service and on completion of training was posted to St. Pol airfield, Dunkirk. During 1915 the German forces began a bombing campaign against London using Zeppelins. On the night of 6-7th June 1915, Warneford set out with three other pilots to destroy the Zeppelin sheds at Evere and Berchem-Ste. Agathe. At 1.15am he spotted a Zeppelin returning from a raid on England and turned to pursue it. Arriving at close quarters, he was driven off by machine-gun fire - his own machine was unarmed - but he followed the airship until it began to descend near Brussels. Once he was above the Zeppelin, at 3.20am, Warneford swooped along the length of the huge hull, releasing his six small bombs in a string that set the hydrogen gas on fire. The vast explosion damaged his machine and forced him to land behind enemy lines. After he had repaired his machine he was eventually able to take off and return to base. Warneford woke the next day and was handed a telegram. It read - "I most heartily congratulate you upon your splendid achievement of yesterday in which you single-handedly destroyed an enemy Zeppelin. I have much satisfaction in conferring on you the Victoria Cross for this gallant act. GEORGE R.I.

The following day, Marechal Joseph Joffre recommended him for the Knight's Cross of the Legion d'Honneur; its citation automatically brought the Croix de Guerre with a Palme. The two awards made him a national hero in both countries." (King Edward VI School 2003)

To give you an idea of how big a hero he must have been, I was born in Warneford Hospital and our family house in Stratford-upon-Avon was also called Warneford.

To turn to my own schooling, however, my school reports show that I was a very inconsistent and unconventional learner. I was always quite good at Geography, my second year report reads: "1=, Very Good, he has worked really well", but in other subjects the comments were much less flattering.

"Latin 17th. Poor. He must revise the fundamental grammar if he is to make a success of Latin.
French 19th. He could do more to improve his progress; the exam was a searching test (45%).
Mathematics 21st. A steady improvement early in the term failed to survive the examination. There is hope, however."

These types of comments dogged me through my schooldays up to, and after, my O level examinations. One of my final Latin reports read: "27th. Relies on guesswork and will not be induced to trust in basic rules." By the time I sat my O levels the school was anticipating that I would not do very well: they thought I would receive one E grade (a marginal fail), three D grades (50-60%) and four C grades (60-70%). To my own surprise and, I suspect the school's surprise also, I actually achieved three As, three Bs, two Cs and two Es. The predictions were incorrect for every paper by at least two categories! Why was this?

The answer to that question lies in two directions. The first lies within the school itself because I always resisted their attempts to force me to rote learn – surface learning as it is called in educational theory. Compounding the rote learning was homework, which was dished out even after school on Saturday morning in my first year, and to my mind this was quite unacceptable. There were also frequent examinations which were held with no opportunity to revise. When I was belatedly given the opportunity to consolidate the knowledge myself in the couple of weeks before O levels I managed to do very well, considering.

The second reason for my inconsistent performances lay in my home background. My family tree had no one in it who had ever proceeded much beyond secondary schooling. My mother and father were exceptions as they had both been to a good Yorkshire grammar school themselves – Ermisteads School in Skipton – and my mother had gone on to Teacher Training. She had not been permitted to go to university by my grandfather as it would have been a waste of time and money for a mere girl! My father left school in the mid 1930s at the height of the Great Depression and, after some years of clerical work, enlisted in the army at the outbreak of World War II. There was no real family experience, therefore, for me to draw on to assist me as the school urged me forwards to a career in the professions or in business.

When I did turn to my mother and father for assistance their answers were sometimes less than helpful academically. On France (and the French language) my father was adamant that nothing much ever came out of the place where he had seen so much suffering. My father lived through both the evacuation of the British Expeditionary Force at Dunkirk in 1939 and the Normandy landings in 1944. My mother could only see the point in Latin if I wanted to be a lawyer or a doctor and I couldn't see myself becoming either of those.

There was also my expatriate Yorkshire upbringing to consider. I think that Yorkshire people can be summed up as 'proud, parochial and near perfect' so who would need to learn a foreign language, ancient or modern? By their own account the county has produced the world's greatest in the following:

- Exploration – Captain Cook;
- Literature – the Bronte sisters;
- Sculpture - Henry Moore;
- Art – David Hockney;
- Town Planning – Titus Salt;
- Chocolate manufacture – Joseph Rowntree;
- Cricket – Sir Len Hutton and many, many others;
- Politics – Lord Harold Wilson.

Yorkshire people are proud of achievement through the 'self-made man' route which my own father followed. As I present this lecture tonight it is clear to me that this is also the source of a good deal of my own individualism.

I stayed on at school to do A levels and my reports show the usual trends. Just before the final A level examinations the school was predicting two Es (marginal fails) and one D grade (marginal pass). My reports make interesting reading:

“English. He works well. His examination result was moderate yet sufficient to suggest a reasonable pass for the summer.

Economics. His recent examination was poor (27%). This is worrying and he must make a real effort in the short time that remains.

Geography. He has never been a strong candidate, but he has worked quite well and deserves a pass.”

My actual results show that when I was left to revise at my own speed and given time to consolidate and structure my understanding of the material and concepts then I could perform well. I achieved one A grade and two Bs – though I did manage to fail O level French again! I never did get to walk across the stage on prize day, one of my real regrets as a schoolboy, since the only awards I ever got were handed out after I had left – I won the Geography prize(not bad for someone who deserved a pass) and was co-winner of the school leaving prize.

It is quite interesting to note here that although I hadn't the paper qualifications from school I went on to learn medieval Latin quite easily when it was necessary for my PhD. Furthermore, my mathematics teacher was proved to be right when he said 'there is hope' since I was to go on and teach Quantitative Methods for many years in my academic career.

To get into University at that time it was necessary to have at least one foreign language and some 'serious' science and I had neither. This is why my school had insisted I carry on trying to pass French, though I wasn't aware of that at the time. The only three Universities which would have me, given my poor predicted grades, were Wales (Aberystwyth), Lancaster and Strathclyde. Since Strathclyde gave me the easiest grades to achieve I provisionally registered with them and subsequently enrolled in 1970 to study Geography, English and Geology (as a minor subject).

Strathclyde had a system very like the South African one, a four year Honours programme though I was allowed straight into the second year because of my excellent A level grades. Once again I was to learn that it is possible to succeed without the 'correct' background as I was to get a distinction for first year Geology without the necessary Chemistry or Physics. I went on, however, to major in Geography and English. I had a most special time at Strathclyde with both the student Drama society and then was at the very beginning of an exciting new venture: the community based Strathclyde Theatre Group. Here I learned a great deal about acting, directing, stage management, lighting, publicity etc. The two years spent in improvisation classes developing the Golden City (which went on to win an Edinburgh Festival Fringe First Award) left a lasting impression on me and influenced my teaching to this day. My Third Year and Honours students in the audience tonight have played role playing games with me because of those early experiences.

Geography was to claim me, however, because of their first rate seminar and tutorial programmes which introduced me to the real intellectual ferment in the discipline. I quickly realised that to be a Geographer required quite surprising depth and breadth of thinking. The discipline at that time was undergoing some extremely interesting development as thinkers like David Harvey introduced us to the 'other worlds' revealed

by different ways of seeing and understanding. 'Other Worlds' is the title of the Escher print which graced the cover of Harvey's seminal work of the late 1960s, *Explanation in Geography* (Harvey 1969). It is an apt metaphor for the very different ways in which Geographers can see the same world but through different windows.

I was to end up with a B.A (Hons) Upper Second in 1973 – the product of some good work but not enough sustained intellectual effort for a First (the theatre group was partly to blame for this). I was fortunate enough to stay on at Strathclyde as I was offered a research award for a Masters in urban-historical geography which was subsequently upgraded to a PhD. My thesis studied the development of the ancient Scottish city of Stirling from its foundation in 1124AD to the end of the nineteenth century. It examined two, seemingly simple, research questions:

1. Why are cities founded?
2. How do they develop?

Once I had 'seen the light' and come to Rhodes these were to become the two organising principles for my Honours course in African Urban Development (1986-2000). Some of the older students in the audience may now see where the course idea originated. Figure 2 is the frontispiece of my thesis. It is a painting by Vosterman (1673-4) and shows the city stretched out left to right on a volcanic ridge with the royal castle at the highest point (Fox 1978).



Figure 2: Stirling in the Time of the Stuarts, painted by Vosterman in 1673-4

I stayed on to upgrade my research to a PhD for some fairly simple reasons. The first one of which was straightforward - because my supervisor (Brian Dicks) encouraged me to do so. Brian also urged me to publish the work I was presenting at postgraduate seminars and, in the course of time, I was to do so, though the papers evolved as I matured intellectually (Fox 1979, 1981, 1983a, 1983b). If I had published them rather more quickly, as Brian tried to get me to do, it would certainly have helped my job opportunities and I would most probably not be here today. The further reasons for upgrading revolved around the three other great interests in my life.

1. I had met my future wife, Kate, who is sitting in the academic section of the audience tonight. You can't get to be much more Yorkshire than to be a (Kate) Rowntree of York. She had just embarked upon a PhD programme in the Civil Engineering Faculty at Strathclyde.
2. Strathclyde Theatre Group was halfway through creating the Golden City and I wasn't going to miss out on all the fun of putting it into performance in Glasgow and Edinburgh Cathedrals.
3. I had discovered Scotland's mountains and was spending winter time (ie most of the year) mountaineering and skiing.

I was to get my PhD in 1978, a little over schedule as a result of having such time consuming ‘other’ interests, and I learned a great deal from my PhD. Methodologically and philosophically I had come to terms with difficulties involved in integrating very different approaches. Figure 3 below indicates that in the distant past, for which there is usually very little information, my understanding was based on building up a picture from logical inference. A process shared by archaeologists amongst others. As we move towards the present there has been an explosion of information which we have to reduce in order to derive an understanding. Learning about urban development historically is therefore a matter of either construction or reduction, there is no one worldview. The challenge lies in being able to learn such different methodologies and techniques and then to try and fit your findings together. This figure is the conceptual basis of the very first lecture I ever gave to Geography students, in 1976.

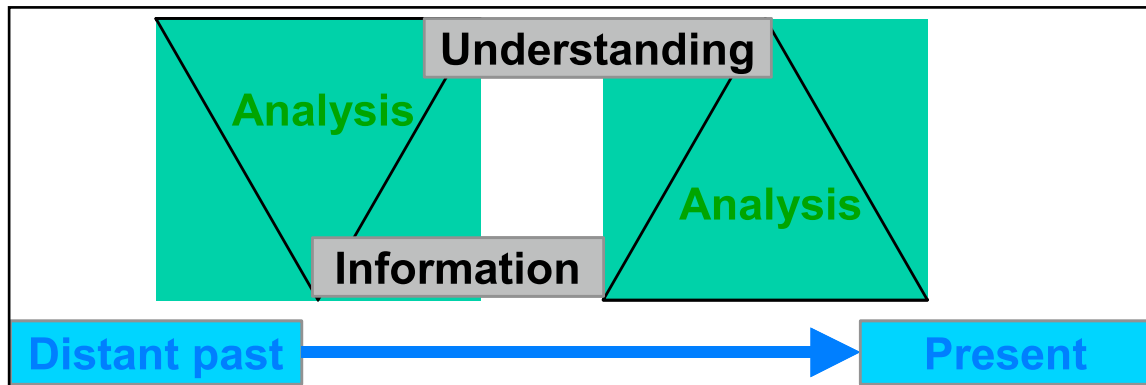


Figure 3: What did I learn from my PhD? Flexible Philosophies and Methodologies

By the time I had graduated with my PhD employment opportunities were very limited and hotly contested. I was to move to Africa in 1979 with my (pregnant) wife at a time when many other young aspirant professionals were becoming economic refugees – a combination of economic recession and Margaret Thatcher’s neo-liberal policies meant that our services were surplus to requirements. We moved to Kenya for some very good reasons, the first of which was that we were both offered contract positions (for six years as it turned out) at Kenyatta University. Furthermore we were both Geographers and, after all, Geographers are supposed to be learning about different places so why not Africa? Lastly, Kenya has some splendid mountains.

Unfortunately there is not the opportunity to discuss just how much I learned from Kenya. Most importantly for my career was that the six years in Kenya showed me how to teach, a process which started from very early days by having to evaluate my own BEd students teaching in some of the remotest parts of the country. My research interests also developed considerably and became:

- far more applied in nature, since Africa’s development problems are so great;
- they encompassed political and rural considerations since politics is so clearly important to African development and the rural areas are where most of the people live;
- they encompassed land issues, particularly the impact of land division, following the insights shared by Dr. K. Wachira.

My interest in land division and its importance to understanding a whole range of issues from settlement patterns, through land use, to tenure systems and resettlement derived from a fieldtrip. As was typical, we went on joint trips in Kenya thereby avoiding the negative impacts so often found in Anglo-American and European Geography where their separate teaching activities entrench the physical: human geography systematic divide in the discipline. Dr Wachira was Kenyatta University’s biogeographer and he observed, as we drove up to a forest station in Kiambu District, that the colonial land divisions of nearly 20 years earlier were all still clearly observable. We had left the former alienated lands of coffee estates around the University and driven up through the densely settled communal areas (the former Kikuyu Native Land Unit) and were, by then, sitting on the Kikuyu grass next to a huge privet hedge outside a forest station. The Kikuyu Escarpment Forest Reserve we were visiting also derived from colonial times. I realized that population densities, settlement patterns (rural and urban), agricultural land use and different tenure systems could all be observed before me within the broad template we had just discussed. So began a research interest underpinning a good deal of my research through the last 20 years that has expressed itself in the context of elections (for example Fox 1994, 1996), urban and rural development in Kenya (Fox 1991, 1992; Fox and Rowntree 1998), and South Africa (Fox and Rowntree 2001, 2002).

Now we can move our attention towards the second part of tonight's lecture where we focus on the top triangle in Figure 1 and examine discovery, integration and application within the context of the land issue.

Between the Reds and the Greens

The debates around the land question in South Africa have been characterized by poor conceptualisation of the different ways in which we can understand 'the land'. This portion of my lecture will start with describing an approach which should deepen our understanding as to why the issue is so open to misunderstanding between different parties. Here, therefore, I will be undertaking the integration role of the scholar through contextualising the land question intellectually.

Our debates about the land issue are also weaker than they could be since they suffer from a lack of comparable environmental-geographical and political-economy parameters. This hampers meaningful attempts to learn from the experience of other African countries such as Zimbabwe and Kenya. The delimiting of these parameters will follow after the conceptual discussion and here the presentation lies largely in the realm of scholarly discovery but is strongly related to both integration and application. For example, I will attempt to answer a difficult applied/integration question: can we expect ethnic and racial violence, as has been experienced in Kenya and Zimbabwe, as a result of land hunger? There are also seemingly 'simple' application questions like: how much good agricultural land is there in South Africa that could be redistributed once we allow for existing degradation?

The conceptual dilemma revolves around a relatively straightforward question – how do we understand 'the land'? The way of understanding which I would like to present here comes from the relational geographic framework. A theoretical approach described by Holt-Jensen (1999) that derives from the work of American Geographer Robert Sack. In the prologue I promised to simplify theoretical constructs otherwise I would exceed the capacity of your working memories and so the following is my own attempt to reduce a complex theory.

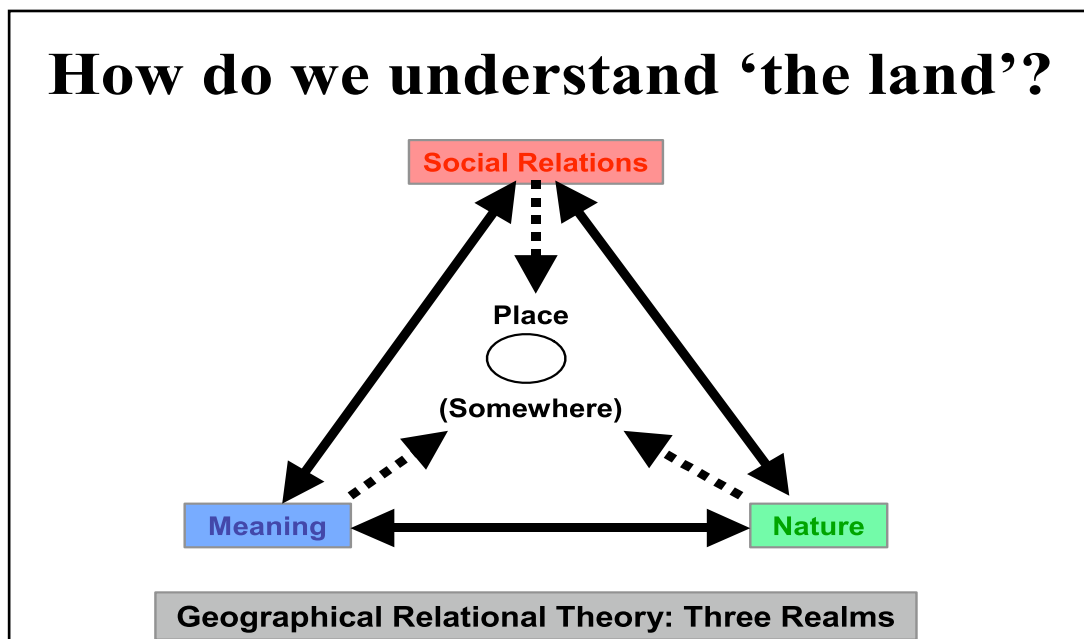


Figure 4: Simplified Relational Theory

Relational theory maintains that there are three different realms or perspectives through which we can understand the nature of a place. Figure 4 depicts them as lying in a triangle with a place in their center. Nature (the green realm) is very much the domain of the natural scientist who uses empirical, often positivistic, ways to appreciate, describe and analyse places. The paper by Schoeman and Scotney (1987) which delimits South Africa's agricultural potential is a good example. The South African Atlas of Agrohydrology and Climatology (Schulze et al 1997) would be another.

Space and place are not central concerns to the realm of social relations (the red realm). Here typical researchers would be social or political scientists examining class formations, government, modes of production or gender and this may inform a critical understanding of place. The African National Congress's (ANC) Reconstruction and Development Programme (ANC 1994) is a good example of a policy aimed at transforming this place, South Africa, through critical understanding of its social and political evolution. Many of our government departments belong to this realm, for example the Department of Land Affairs. There are others, however, which belong more in the domain of nature, for example, the Departments of Agriculture or Environmental Affairs and Tourism.

The third realm is that of meaning, the deeply personal attachment to place deriving from a person's values, meanings and beliefs. For example, many places have spiritual attributes that are only perceived by people with particular beliefs and histories. This realm has been studied by the anthropologists and humanistic geographers such as Yi-Fu Tuan (1977) or Robert Sack (1980). Their understanding of place depends on understanding what is in the mind of the beholder, Holt-Jensen (1999 page 95) paraphrases Tuan as saying "geography is *the mirror of humanity*: to know the world is to know oneself."

The arrows in Figure 4 have been drawn to show two things. Firstly, the centripetal arrows indicate that each realm is one way of appreciating a place. Perhaps it is pertinent to say now that the people who debate the land issue frequently come from different, polarized, realms. Policies derived by government may belong to either the realm of nature or of social science but they frequently clash with people's own attachment to place which is based in the realm of meaning. Secondly, the rotational arrows show that there are people and approaches that attempt to integrate two, or more, realms so as to develop a much richer and complete understanding of place. The title of this lecture derives from this interpretation since what follows is an attempt to appreciate the land using both the realms of social relations (the reds) and nature (the greens). Further examples of this type of approach have been produced by Timm Hoffman and his co-workers (Hoffman and Todd 2000) and it also underpins my own work with Kate Rowntree (Fox and Rowntree 2001; 2002; 2003).

In order to compare South Africa with Zimbabwe and Kenya we need to establish their common features. Some of these are readily observable and are listed below.

1. All three countries are located within what is called highland Africa, Highland Africa is one of the two major ecological and topographic continental divisions and encompasses a huge area of Southern and Eastern Africa which lies above 1000 metres in altitude. It consists of all of the area south of a boundary running east from the Atlantic Ocean through northern Angola and Zambia to the Cop-perbelt. At that point the boundary turns northwards and runs along the western borders of Tanzania, Rwanda, Burundi, Uganda, Ethiopia and Eritrea to exit into the Red Sea.
2. Each of the countries is known for its agricultural successes past and present and all three of them were sites of agricultural intensification, based on first and second generation Green Revolution technologies in the latter half of the twentieth century.
3. The major land divisions, associated tenure systems and land practices are broadly similar. In spite of different terminologies the main types are communal land, commercial land, state land, forest and conservation reserves.

There are, however, some key differences between the three countries which we need to see within the context of a recently reopened debate. Here I need to digress a little to describe the work of Acemoglu, Johnson and Robinson (2000) and Easterley and Levine (2002) before returning to the theme of comparability.

The two sets of researchers have set out to try and explain the different patterns of economic development in former colonies through examining the relative significance of the following approaches.

1. The geography endowment view which maintains that the environment and spatial location directly affect inputs into production, for example, land, resources, labour and accessibility, and so affects development.
2. The institution view. That the environment has been conducive to certain types of development (neo-Europes versus extractive colonies) which themselves produced long lasting institutional impacts. The relatively disease-free colonies of temperate regions (colonies of settlement or neo-Europes) have experienced a much deeper penetration of legal and other systems whereas colonies of extraction have not. This high degree of embeddedness has led to improved economic development.
3. The policy view. Economic policies and institutions reflect current intellectual paradigms, pertinent information and existing political forces. To change and improve economic development then depends on adapting policies and institutions to current norms, for example, the Washington consensus.

Acemoglu *et al* found that early institutions, and land division would be a good example of an institution, have persisted in large part to the present and that the differences in institutions accounts for most of the variation in economic development. They cautioned that their work should not be interpreted deterministically since they recognize that institutions are not solely the result of colonialism. Easterley and Levine took this conclusion somewhat further and concluded their cross-country survey of economic development by finding that measures of geographic location (temperate versus tropical, landlocked etc) and environment impacted through their role in promoting long lasting and defining institutions. Policies are not a significant factor once the impact of natural endowments on institutions has been accounted for. This deep seated institutional inertia might explain the major problems which the South African government has in implementing its transformative polices that are a radical departure from the apartheid and colonial institutional past.

Figures 5 and 6 are attempts to encapsulate this discussion through presenting the Human Development Indices (HDIs) for Africa's countries as stem and leaf diagrams. The Human Development Index is published annually by the United Nations and is a standardized national summary measure encompassing the life expectancy, educational parameters and GDP per capita (United Nations Development Programme 2001). Figure 6 highlights the acronyms of the sub-tropical/temperate countries and small islands these would be described as beneficial attributes in the debate above. Clearly there is a broad relationship between these factors and the overall levels of development in the appropriate countries lending weight to the environment and geography affecting institutions argument. South Africa lies very close to the top of the diagram (HDI of 0.7) in a group with Cape Verde, Algeria, Tunisia, Mauritius and Libya. Zimbabwe and Kenya, however, are found in the middle of the two diagrams.

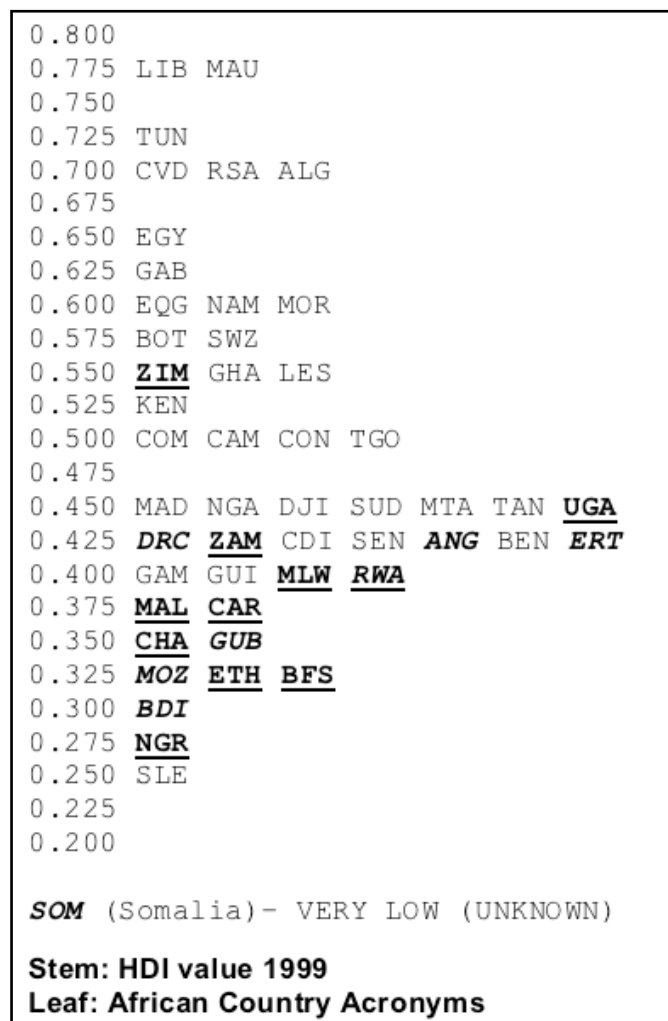


Figure 5: Stem and Leaf Diagram, Human Development Index Africa 1999, *Portuguese* and *Belgian* Former Colonies and/or **Landlocked** States.

Figure 5 focuses on the negative national parameters by highlighting the former colonies of two of the most extractive colonial powers, Portugal and Belgium, and also picks out the landlocked states. Once more we can see that there is a correlation between these factors and human development since the countries with these attributes lie, with one or two exceptions, either in the middle or to the bottom of the diagram.

If we accept these general arguments then we can start to look for more nuanced similarities and differences between the three countries we are interested in. All three belong to the neo-European, or colonies of settlement, category, though Kenya and to a lesser extent Zimbabwe had significantly shorter exposure to colonial institutional processes. One key determinant here was the high altitude, tropical environment which was thought in colonial times to be hazardous for Europeans (Hewetson 1922). Thus the institutional types and processes which were embedded by the settlers creating their neo-Europes would be more likely to be adapted, modified or completely overthrown in Kenya and Zimbabwe than in South Africa.

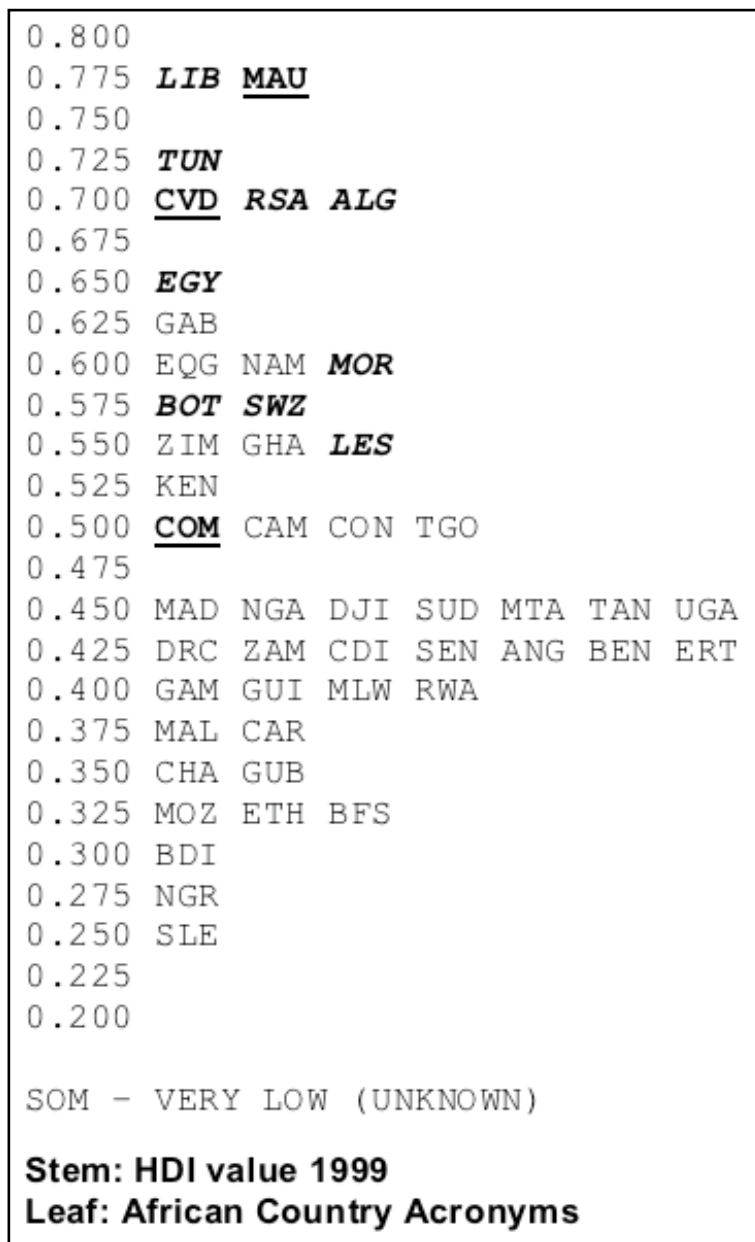


Figure 6: Stem and Leaf Diagram, Human Development Index Africa 1999, *Sub-Tropical Countries* or Small Islands

Further major differences are also purely geographical. South Africa is temperate whereas Zimbabwe and Kenya are both tropical. Furthermore Zimbabwe is a landlocked country and this, along with being tropical, has been found by the researchers to have a negative impact on the degree of development.

Where does all of this leave our ability to compare the three countries? I think it shows that there are some good grounds for attempting a comparison since there are similarities but we also need to be quite cautious. The human development indices show us that Kenya and Zimbabwe are significantly less well developed than South Africa and one of the main reasons for their different development path lies in their resource endowment (both have much less mineral wealth) and their institutional impact which is relatively weaker than in South Africa. In what follows we will see that the agricultural resources of all three countries are surprisingly similar though the measures used to depict them are somewhat different.

The maps below are a unique attempt to compare the agricultural potentials of the three countries and derives from my recent work with Kate Rowntree (Fox and Rowntree 2003). The measures which we have been able to derive comes from the work of other natural scientists and so this part of our analysis lies squarely in the green domain of nature. For South Africa we have six categories of biological productivity, for Kenya there are six main agro-ecological zones and for Zimbabwe there are six natural farming regions. The shading of the three maps indicates high fertility in black and low fertility in white with four intermediate divisions of diminishing potential. Looking at the three maps it is immediately apparent that there is very little good land in any of the countries, less than 10 percent, and low potential areas make up most of the surface area. Our measure from the realm of nature is therefore showing us a strong degree of comparability.

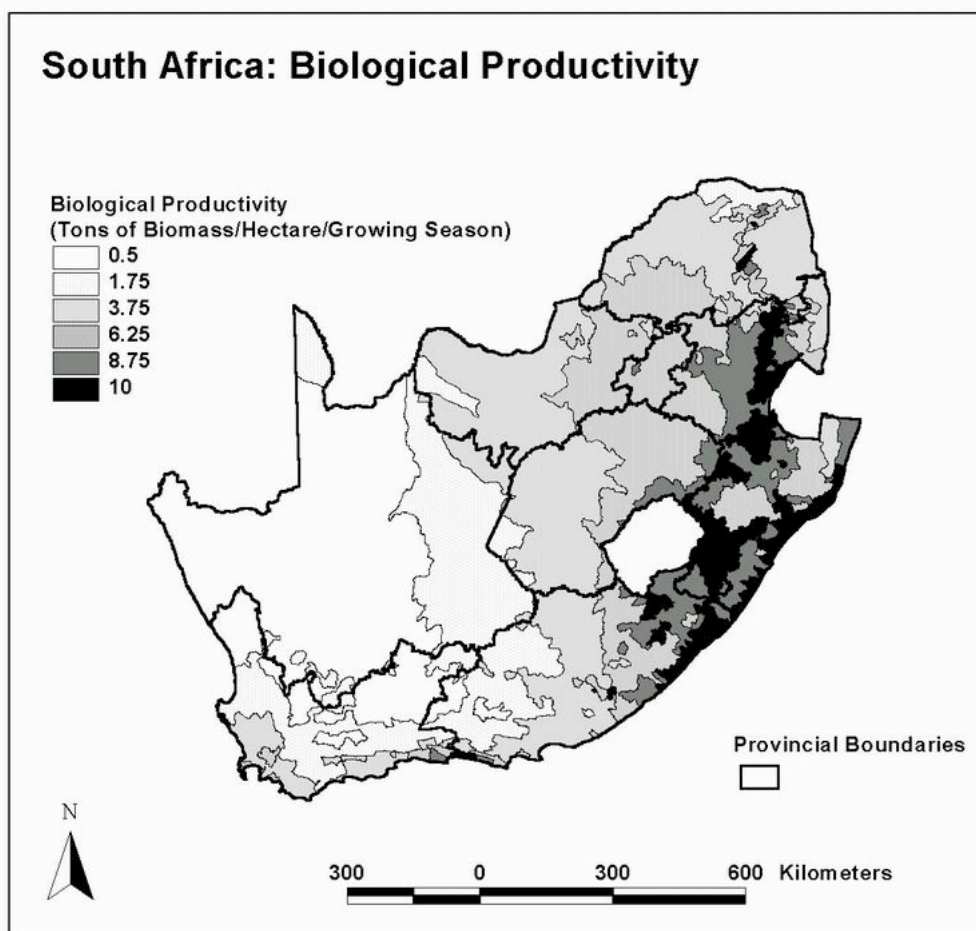


Figure 7: South Africa's Biological Productivity

When we overlay these six agro-ecological categories over the major political-economy land divisions for each country then the possibility for comparison begins to look tenuous. We have analysed the five main land

division types: communal, commercial, state land, forest and conservation areas and will be mostly concerned tonight with the communal lands since these are a key indicator of inequity and subsequent land hunger.

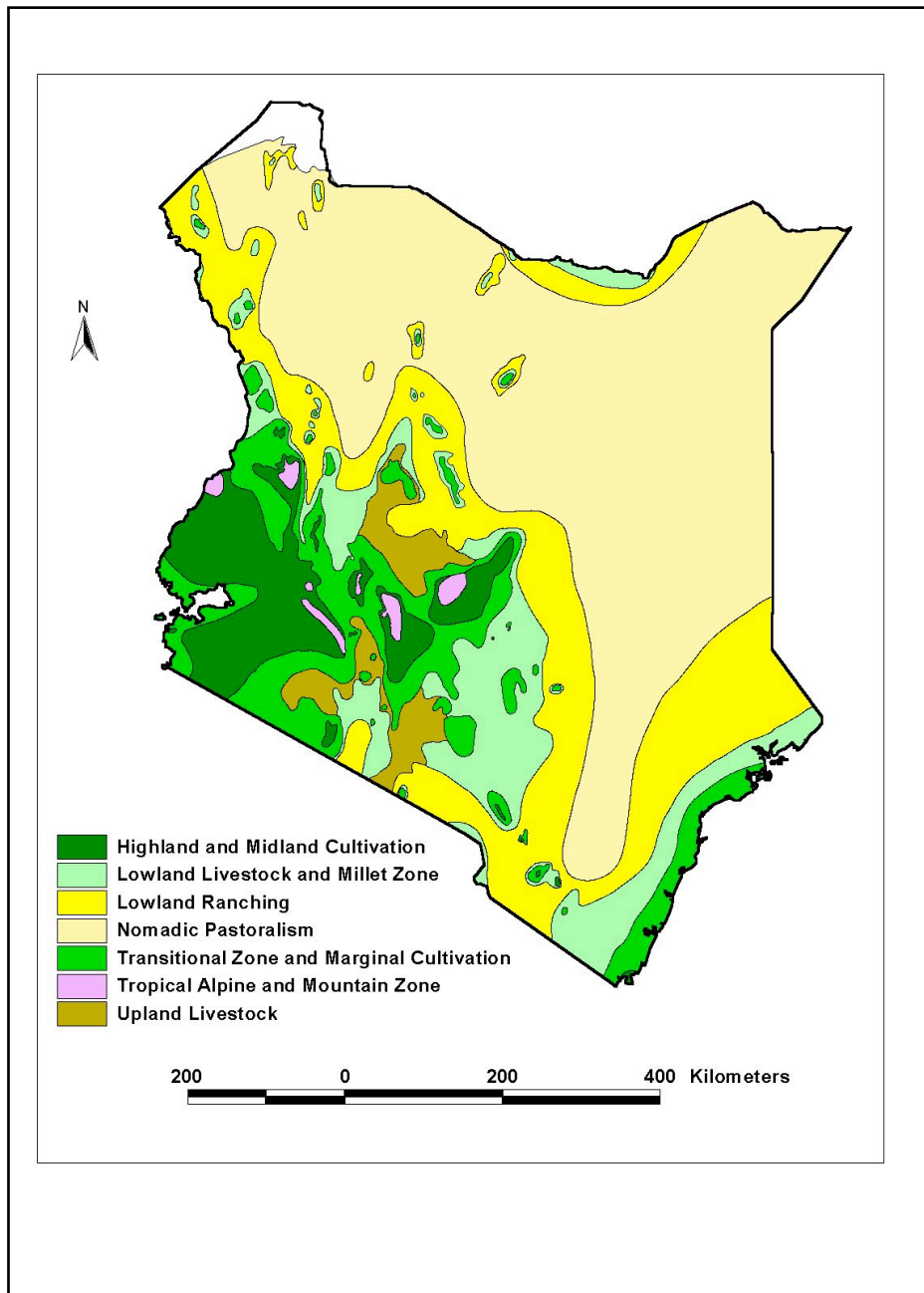


Figure 8: Kenya’s Agro-Ecological Zonation.

Kenya was the first of our three countries to emerge from colonialism in 1963 and our analysis shows that 22 percent of the land was reserved for black use under communal tenure systems at this time and of this allocation approximately 45 percent was of moderate to high arable potential. Zimbabwe gained independence in 1980 and here we find a different picture since far more land was communal, 46 percent, but only 25 percent of this was of decent arable potential. In South Africa in 1994 only 13 percent of the land was communal, by far the lowest figure, though approximately 45 percent of it was of moderate to high potential. This makes the starting points of the post-colonial land question rather different since there is no clear commonality in the distributions. Furthermore, the development paths which the three countries have followed since independence have also been quite different.

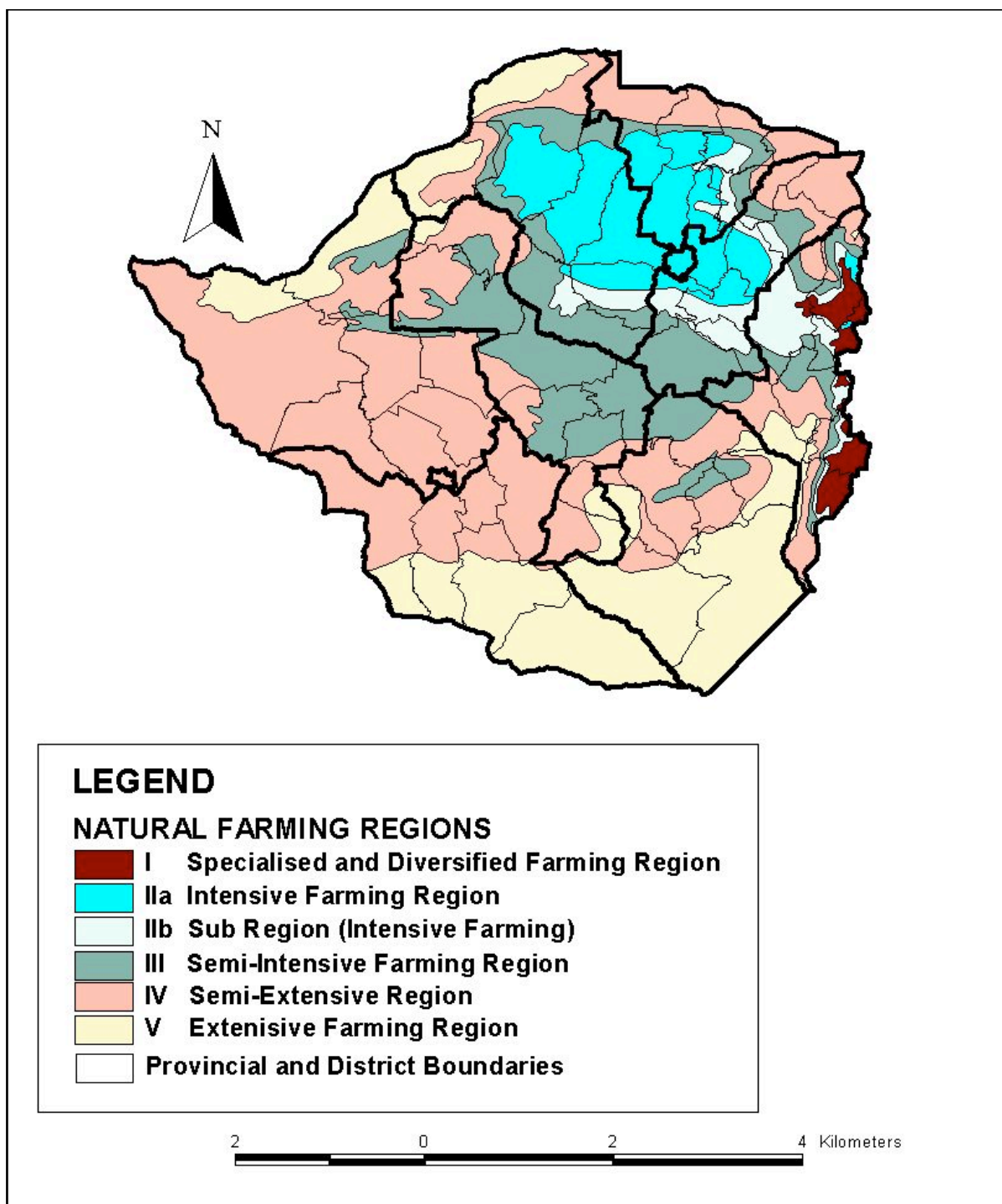


Figure 9: Zimbabwe's Natural Farming Regions

In Kenya the overall trend over the past forty years has been contraction of the communal land sector, expansion of land held under freehold and widespread resettlement through formal and informal practices. Zimbabwe, on the other hand, has experienced contraction of the freehold sector since all post-colonial resettled land has become state land and there has been much seizure of land (the so-called 'fast track' method) over the last three years. It is probably fair to say that South Africa hasn't yet experienced major redistribution or reform, though the restitution process has accelerated in recent years. We are left concluding that it is very hard to see South Africa's land issue following that of Zimbabwe or Kenya since so many of the initial and subsequent land development parameters are different.

A forgotten dimension in the land issue, particularly violent land seizure, is the role of electoral systems within the national political economies and this, too, shows a significant divergence between South Africa and our two tropical comparisons. Both Kenya and Zimbabwe have place-based electoral systems using parliamentary constituencies as their basis. In their recent histories the geographical location of ruling party and opposition supporters has been vitally important. For example, in Kenya the Kenya African National Union (KANU) regime promoted ethnic clashes in the 1990s to reduce the number of Kikuyus in Rift Valley Province. This made it difficult for a Kikuyu presidential candidate to receive the minimum support (25 percent) needed under Kenya's constitution.

Similarly, since 2000 Zimbabwe's ruling ZANU-PF has acted to minimize opposition support through intimidation, the removal of Movement for Democratic Change supporters and the influx of ZANU-PF supporters to Mashonaland, Midlands and Masvingo Provinces. The February 2000 referendum results had revealed widespread opposition to the ruling party in these areas and so the campaign of violent land seizure and intimidation intensified. Figures 10 and 11 portrays some of the work which was undertaken by two of my Zimbabwean students, Easther Chigumira and Bruce Glover. It shows the 2000 Zimbabwean parliamentary election results and also the pattern of farm invasions through that year. It is clear from these maps that in order for ZANU-PF to win the elections in the central provinces of Mashonaland, Midlands and Masvingo they chose to promote farm invasions and intimidation.

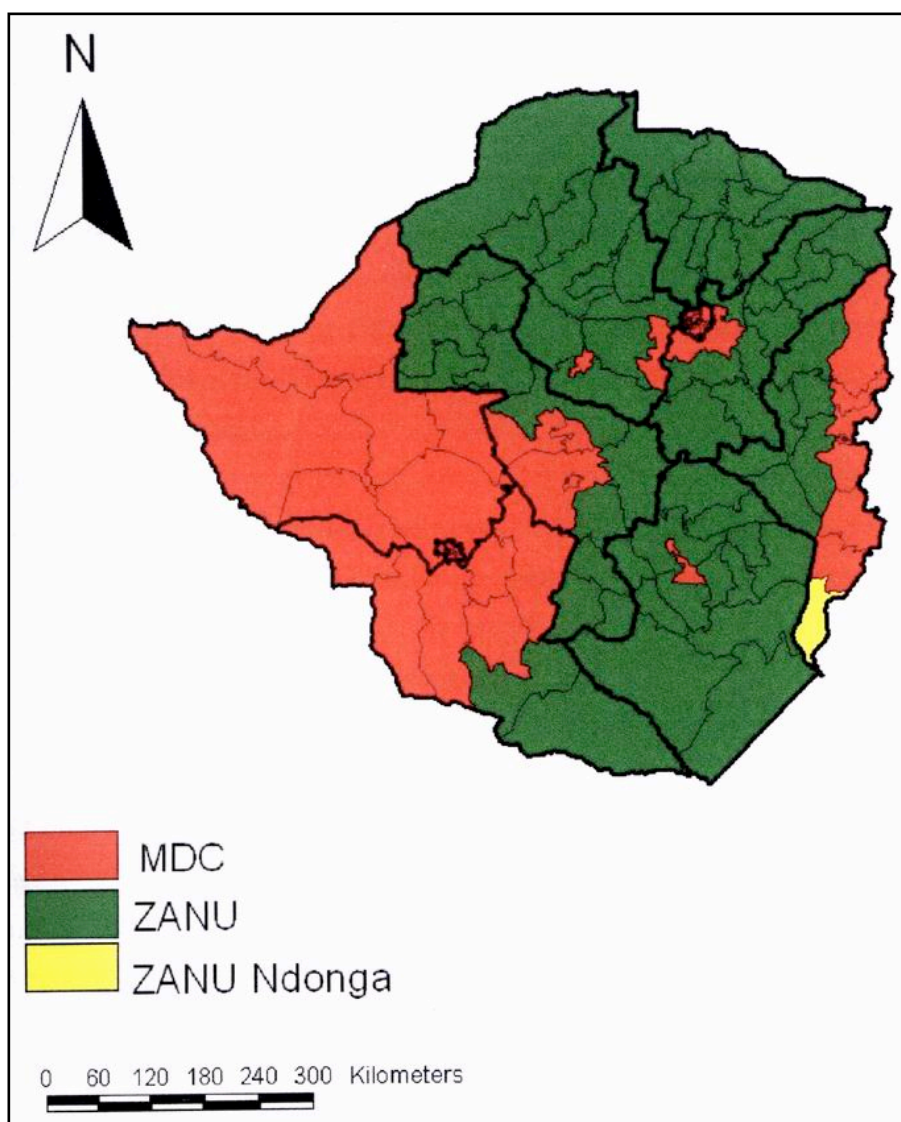


Figure 10: Constituency Parliamentary Election Results Zimbabwe 2000.

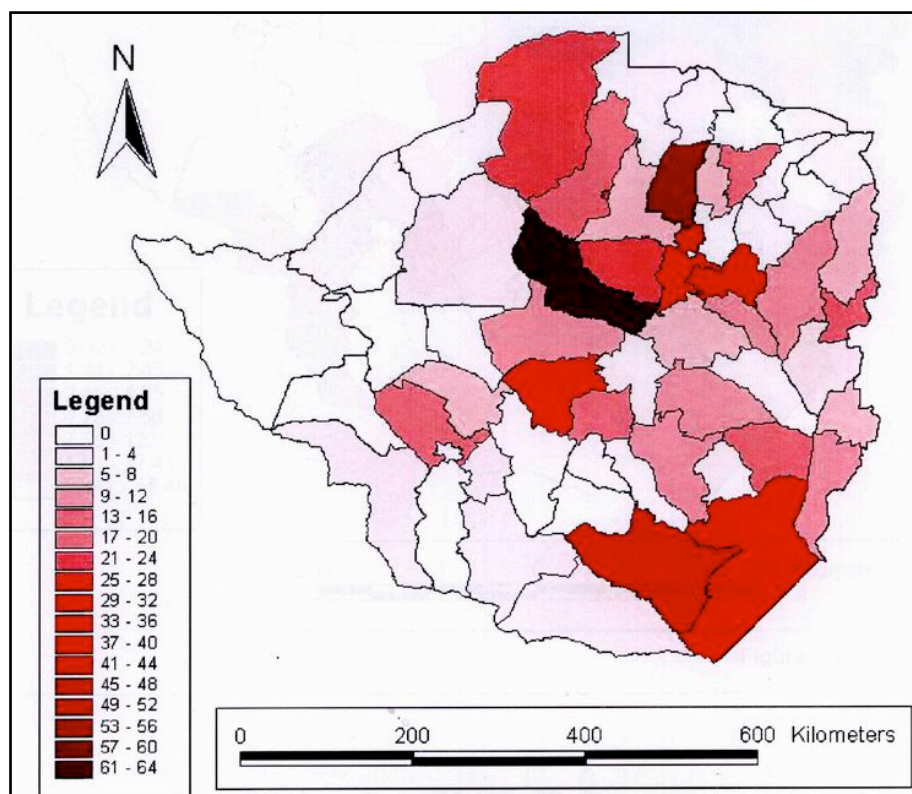


Figure 11: Total Number of Farm Invasions by Districts Zimbabwe 2000

We should be grateful that South Africa has retained its system of proportional representation since this means that the location of your supporters is immaterial at national level. The critical feature in South African politics is having a significant amount of support, wherever it is located, to gain you seats under the party list system. The geographical scales at which location is important for representation are the provinces and municipalities but as yet there has been no report linking seizure of land or violence to local or provincial representation.

My final example of scholarship ‘between the reds and the greens’ is aimed at answering the simple question raised at the start of this part of my lecture: how much good agricultural land is there in South Africa that could be redistributed once we allow for existing degradation? It is quite feasible to produce an answer to this through a seemingly simple process of reduction. Start with the map of South Africa’s biological productivity (Figure 7) and extract out the former homeland areas of communal land tenure since it will be the freehold areas and state lands that provide the stock of land for possible redistribution. Then proceed by removing areas of high relief and areas already identified as being heavily degraded. Finally, remove the urban areas and conservation areas. Figure 12 maps the result of these processes and summarises the statistics of land available. South Africa has only 57,602 square kilometers of land in the categories of very suitable or suitable for arable cultivation. Most of it located in Mpumalanga and KwaZulu-Natal. If this land were to be redistributed it could settle 1, 728,060 people at a density of 30 persons per square kilometer. The marginal or moderate lands are a further 126,648 square kilometers and here it might be possible to resettle 1,266,480 people at a density of 10 persons per square kilometer. So the result of this applied piece of research shows that it might be possible to resettle some three million people on land of varying arable potential. I am neither saying that we should redistribute the land nor could redistribute it, but these are the sort of consequences and possibilities.

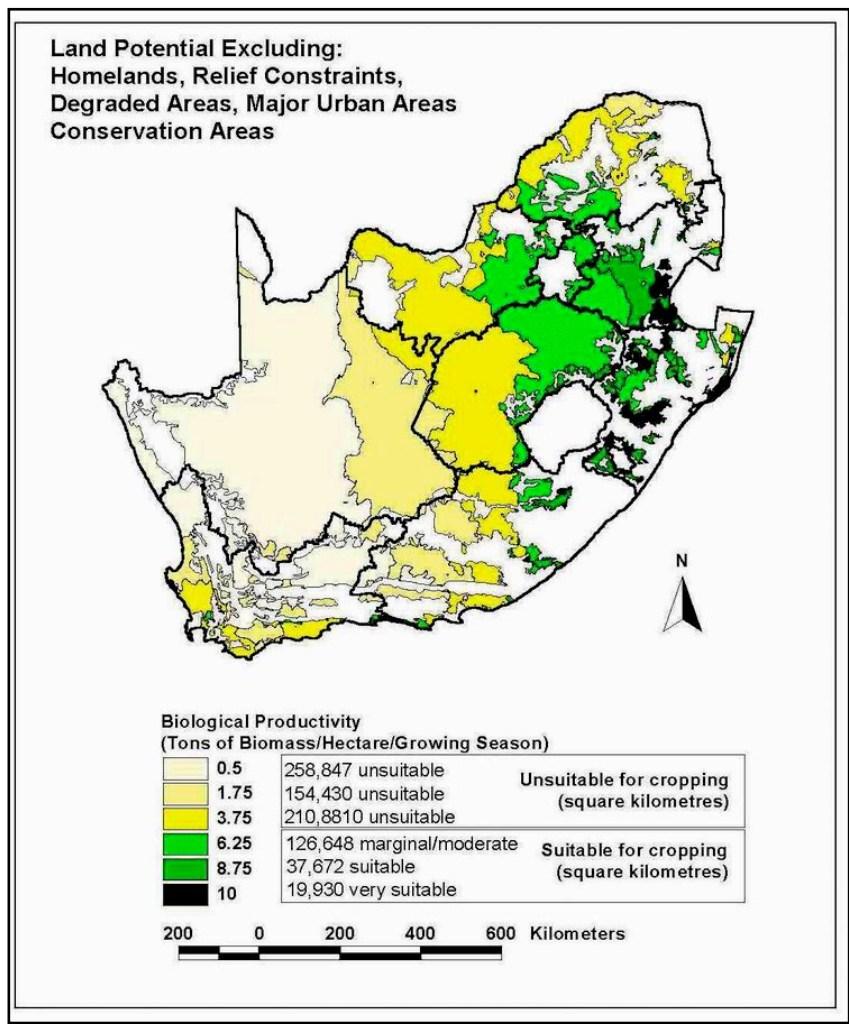


Figure 12: South Africa, Land Potential for Redistribution?

Dedication

I would like to end this evening's lecture with a short dedication since this is an admirable convention I have recently witnessed at a colleague's inaugural lecture at Utrecht University in the Netherlands. This lecture is dedicated to Kate - my wife, colleague and soul mate - without you my career would not have blossomed and I would not be here before you tonight.

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