

Towards Academic Freedom for Africa in the 21st Century*

Amina Mama**

Abstract

This paper begins by reviewing the ways in which the higher education landscape in Africa has changed significantly during the last decade as a result of the ongoing regional crisis and the changing perspectives on African higher education articulated within the international development arena and argues that, if the higher education crisis of the 1980s and 1990s was the result of financial conditionalities imposed through structural adjustment, then the ensuing decade has seen a global policy shift that has profoundly changed the conditions under which academic work is carried out. Particular attention is paid to the manner in which the changing, economically-driven constraints on academic freedom, institutional autonomy and conditions of service in higher educational institutions are mediated by other social conditions such as gender inequalities, the HIV/AIDS crisis, the effects of long-term brain drain and the manner in which local capacity is diverted into survivalism. I argue that higher education reforms threaten to undermine the material base for academic life by emphasising privatisation and cost recovery in contexts where poverty is a major feature of life. Exaggerated concerns with “efficiency” and “excellence” lead to increased regulation and surveillance of scholarly output, rendering academic freedom vulnerable to formulaic measures of performance that may be insensitive to the work of African academics. The paper concludes by recommending a programme of activities designed to re-affirm the public stake in higher education, strengthen and diversify independent scholarly work and encourage African governments to adopt policies that will strengthen the tertiary sector and ensure an enabling environment for intellectual development and freedom.

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** Chair in Gender Studies, African Gender Institute, University of Cape Town, South Africa. Email: amina.mama@uct.ac.za

Résumé

Cette contribution commence par passer en revue les changements significatifs intervenus dans l'enseignement supérieur en Afrique dans la dernière décennie en raison de la crise régionale et les dynamiques dans les perspectives de l'enseignement supérieur tels qu'articulées dans l'arène internationale du développement et affirme que, si la crise dans l'enseignement supérieur dans les années 1980 et 1990 était le résultat des conditionnalités imposées par l'ajustement structurel, la décennie qui a suivi a connu un changement de politique qui a affecté les conditions de travail académique. Une attention particulière est portée à la manière dont les contraintes économiques imposées à la liberté académique, l'autonomie institutionnelle et les conditions de service dans les institutions d'enseignement supérieur ont affecté les autres conditions sociales telles que les inégalités de genre, la crise du VIH/SIDA, les effets de la fuite persistante des cerveaux et comment les capacités locales ont adopté le survivalisme. Je souligne que les réformes de l'enseignement supérieur sapent la base matérielle de la vie académique en accentuant la privatisation et la marchandisation dans un contexte de pauvreté. Des préoccupations exacerbées d'« efficacité » et d'« excellence » ont conduit à la régulation et à la surveillance croissante de la production scientifique, rendant la liberté académique vulnérable aux mesures de performance qui pourraient être insensibles au travail des universitaires africains. La contribution conclut par recommander un programme d'activités destiné à réaffirmer la responsabilité publique dans l'enseignement supérieur, renforcer et diversifier le travail universitaire indépendant et encourager les gouvernements africains à adopter des politiques qui renforceront l'enseignement supérieur et assurer un environnement favorisant le développement et la liberté académiques.

Introduction

The current context is one in which there is renewed interest in African higher education among both national and international players for a number of quite widely articulated reasons. Key among these is the global shift towards a much greater reliance on knowledge and information, a trend that is likely to further marginalise the world's poorest continent if steps are not taken to address the fact that we also have the world's lowest higher education enrolment rates. In such a context, the concepts of "academic freedom", "institutional autonomy" and "social responsibility" assume new importance.

However, the changed global and regional conditions within which academia is located pose serious challenges to the observance and strengthening of academic freedom in African contexts. The crisis in African higher education reached its extremes during the 1980s and 1990s. It is worth noting the political context within which this crisis occurred. By the end of 1989, thirty-five of Africa's forty-five independent nations were under military rule, and conflicts

had become alarmingly commonplace. Dire political circumstances have since continued to take a major toll on academic institutions in many countries, as these have been faced with varying levels of direct state repression by authoritarian regimes.

The second major feature of the context has been the imposition of structural adjustment programmes which has often gone hand-in-hand with political authoritarianism. The diminution of the public sector and the “rolling back” of the state has placed severe financial constraints on all African public institutions, and contributed to the virtual collapse of the tertiary sector. The basic needs doctrine of the period led to an either-or-scenario, which supposed that Africa could not afford universities and should therefore focus its limited resources on basic literacy and primary education, as if these were exclusive, rather than mutually supporting, elements in an overall system.¹ Throughout the “lost decade” of the 1980s constraints on public spending clashed with an ever-growing public demand for tertiary education to produce an overall deterioration in the quality of higher education, even as the number of institutions and students continued to grow.

The depletion of African public institutions and the ensuing brain drain have had profoundly negative effects on regional institutions of all kinds, and these issues appear not to have been mitigated by foreign aid or the adoption of global models of “good governance”, as some might have hoped. The fact is that, while incurring vast expenditure on expatriate technical assistance, African governments have continued to experience the increasingly salient need for highly trained people. African analysts have long interpreted the failures of international development recipes as indicating a need for locally grounded and accountable intellectual and strategic capacity to advance democratisation, development and the social justice agenda (Mkandawire and Soludo 1999). Academic freedom is a prerequisite for the production of this capacity.

Various stakeholders are now engaged in the reform and revitalisation of African higher education. These players have disparate agendas, and the extent to which one or another agenda prevails will have major implications for the future of academic freedom, the meaning of institutional autonomy and the feasibility of sustaining Africa’s historical commitment to the social responsibility of intellectuals. The major players include:

- international financial institutions, notably the World Bank
- other international agencies, including American-based foundations, the European Union and Scandinavian agencies, notably SIDA-SAREC
- African governments, and their representatives in the field of higher education

- African universities, academic associations and scholarly organisations
- popular and civil-society interests.

These stakeholders not only have disparate agendas for African higher education, but they also have different capacities to intervene in the re-directions that are occurring. The stakeholder analysis begins with the powerful Washington-based international financial agencies currently driving globalisation, and ends with African citizens who have historically had the strongest and most vested interests in the maintenance of a strong and vibrant higher education sector but whose perspectives are in danger of being ignored.

International Financial Institutions

The negative impact of the macro-economic policies of the 1980s and 1990s need not be reiterated here at any length, because their disastrous consequences for African public services and the higher education sector in particular are well known (Sawyer 2002). Only towards the end of the 1990s did the “Washington consensus” begin to give way to a return of broader development thinking. It is in this context that the renewed interest in African higher education must be located. The World Bank, while it may still regard higher education investment as having poor financial returns, recently acknowledged that tertiary education:

...is a critical pillar of human development worldwide. In today’s life-long learning framework, tertiary education provides not only the high level skills necessary for every labour market, but also the training essential for teachers, doctors, nurses, civil servants, engineers, humanists, entrepreneurs, scientists, social scientists, and myriad personnel. It is these trained individuals who develop the capacity and analytical skills that drive local economies, support civil society, teach children, lead effective governments, and make important decisions which affect entire societies (Ramphela 2002: ix).

The World Bank’s current vision of Africa as a region lacking in human capital has been addressed through a broad framework that views the bank as playing a central role in ‘facilitating policy dialogue and knowledge sharing, supporting reforms ... and promoting the enabling framework for the production of the global public goods crucial to the development of tertiary education (World Bank 2002: xxvi). The bank has therefore provided loans to support both infrastructural development and institutional reform. A separate initiative is the African Capacity-building Initiative, based on the establishment of a number of regional “centres of excellence” envisaged as cost-effective and efficient alternatives to conventional universities. The agenda behind the bank’s higher education strategy is ostensibly designed to rapidly produce technically skilled

personnel needed to service the market-driven approach to development, which the bank espouses.

Other International Institutions

The Higher Education Partnership formed in 1999 between the Carnegie Corporation, Rockefeller Foundation, Ford Foundation and MacArthur Foundation has initiated a joint programme that seeks to revitalise and reform universities in Mozambique, Tanzania, Ghana, Nigeria and South Africa.² The US-based foundations involved have a somewhat independent history of supporting higher education development in Africa; some continued their grant-making even during the period when the World Bank advocated against it. However the extent to which this new funding will create options beyond the World Bank approach remains to be seen.

European donor agencies, notably the Swedish SIDA-SAREC, have also supported African academic activity in various areas, including independent research.³ A major part of the research funding still reaching African research institutions and networks such as the Council for the Development of Social Science Research in Africa (CODESRIA) and the Association of African Universities (AAU) has come from these sources. However the vast majority of African institutions of higher education have continued to rely almost entirely on state funding. The costs of the increasingly limited availability of state support for the core functions of universities have therefore been great, and have hardly been mitigated by the limited availability of international aid or partnership arrangements with colleagues in the West.

African Universities

African universities have clear stakes in the direction of reform and articulate principles that guide the manner in which teaching and research is carried out. Most were established by African governments expressly to address the development needs of post-colonial states in contexts where education was widely viewed as a route to national liberation:

Widespread university education is essentially a post-colonial phenomenon ... [and] only 18 out of the 48 countries of sub-Saharan Africa had universities or colleges before 1960. With the approach of political independence or immediately thereafter, many African countries regarded the establishment of local universities as a major part of the post-colonial national development project. The new universities were to help the new nations build up their capacity to manage and develop their resources, alleviate the poverty of the majority of their people, and close the gap between them and the developed world (Sawyerr 2002: 2).

As early as 1962 the Tananarive Conference on the Development of Higher Education in Africa outlined an ambitious mission, according to which African universities were:

viewed as key instruments for national development. They were expected to produce the skilled human resources necessary to manage newly independent countries, to generate developmentally relevant research ... to provide community service ... to contribute to African unity, and to serve as cultural centres for the nations (Ajayi et al. 1996: 191).

Since then African notions of the university have continued to stress their role in development and a deep sense of social responsibility. The AAU's 'Declaration on the African University in the Third Millennium' (2001) is illustrative, for it insists that higher education is 'the principal venue for knowledge creation and dissemination' and that the university therefore 'occupies a very special place' in African society:

higher education has the function of fostering the capacity of individuals and communities to embrace democratic principles, to uphold human rights and to promote sustainable development (AAU 2001).

Indeed African universities are charged to do no less than 'create an institutional environment that fosters the development of the mind and the ennobling of the spirit, inculcating citizenship and the will to serve' (AAU 2001). Academic freedom is implicitly assumed to be a necessary condition for African universities to fulfil their role:

Through the promotion of research and free enquiry, the open contestation of ideas, and the appreciation and tolerance of difference, African universities must generate and disseminate knowledge and understanding, foster the values of openness and respect for merit, and enrich the general quality of the social life of their communities (AU 2001).

Scholarly Networks and Intellectual Communities

A range of non-governmental national and regional independent centres and networks also make important contributions to knowledge production in African contexts, often in ways that resist being bound by the logic of either the state or the market. Even so those that are nationally based are often highly vulnerable to national political conditions, not to mention the vagaries of fund-raising. Regional centres in particular have seen their relative importance grow with the diminution of the research capacity of the universities. Some, like CODESRIA, have found it necessary to take on teaching and training functions too, as this became a necessary way of ensuring the reproduction of continental

research capacity. It also soon became a valuable way of keeping Africa's scholars up to date on emergent academic fields of study such as governance, democratisation and gender studies. Independent research institutions and networks have a vested interest in academic freedom, not just because their existence requires a basic level of state tolerance, but also because they are often well-positioned to undertake transnational monitoring work, given the longstanding and dynamic networks of scholars through which they operate.

The African People

The most important among the stakeholders in African higher education are the people who demand and utilise African higher education systems. When one reviews the recent history of African higher education, it would be no exaggeration to attribute the survival of the system as a whole to the tenacity of the popular interest in higher education. This interest has persisted across the various development decades, in the face of quite extreme odds, and curtailed the extent to which even the most anti-intellectual regimes have been able to pursue the diminution of the sector. Yet popular perspectives are seldom articulated directly through formal channels. Perhaps the institutions that come closest to doing so are the independent continental networks, notably CODESRIA.⁴ Yet this interest is frequently expressed at workshops and other fora debating the future of African higher education.⁵ Popular perspectives deserve to be reiterated in the context of higher education reforms that may well compromise the social inclusiveness gained in the post-independence period. However popular interests are diverse, contextual and changing, being framed by the broader context of economic globalisation and the simultaneous resurgence of African democratisation movements and struggles for social justice. At the very least they include perceptions of employment prospects within local economies and local political environments, as well as concerns over social justice and development agendas.

All these various groups of stakeholders have different interests in, and levels of influence on, the higher education landscape in Africa. While disparate agendas can be separated out to some extent, it is also clear that they may overlap between and within agencies. Complex interplays between stakeholder groups occur continuously, creating an unstable and rapidly changing landscape that is never fully transparent. The overall scenario can best be understood as the product of interactions and negotiations between and across different and unequal stakeholders. No matter whose interests prevail, it is also clear that the greatest impact will be felt by the African people, as the various outcomes of the complicated processes of higher education development have

profound implications for the survival of a socially engaged and responsible African intelligentsia, not to mention the freedom to pursue their work.

This analysis indicates that African epistemologies and visions for the social and political advancement of Africa co-exist with external perceptions and constraints. Globalisation poses new challenges to Africa's intellectual self-determination, and the regionally focused visions that characterised earlier chapters in the post-colonial experience face new threats in the global economy. The idea of Africa as a continent entitled to produce its own intellectuals for its own purposes has once again to be struggled for and defended against reductionist imperatives that would limit the role of African higher education to the production of the technical, administrative and financial management skills needed to service the residualised public sector and furnish some of the labour needs of the global marketplace. More radical visions of African intellectual life – as linked to democratisation and social justice agendas – have been a key feature of the continental thinking which has motivated and driven considerations of academic freedom in African contexts, and linked these to a profound sense of social responsibility. The long and restless history of student and staff protests against political repression and unfavourable economic policies indicate a high level of social engagement, which on occasion links to broader social concerns and social movements.

Paul Hountondji, the renowned philosopher and a former Minister of Education, describes the policy servicing demanded of academics by many African governments and international agencies as 'rampant pragmatism' (2003: 227). He draws a link between the external over-determination of African intellectual life and Africa's ongoing economic dependency and indebtedness, rejecting the global international division of labour that continues to position Africa in a way that renders regional intellectual and theoretical development redundant. He joins the other major African thinkers who emerged during the twentieth century in calling for a scientific revolution that will be 'a radical appropriation of theory ... [and] a methodological effort to give ourselves the material and human resources for autonomous research' (Hountondji 2003: 232). The late Claude Ake, former director of the independent Centre for Advanced Social Sciences, used more explicit language to suggest that the African intellectual is:

uniquely placed to demystify and expose the self-serving ideological representations of the state and external domination ..., a daunting task ... [that] puts the academic in potential confrontation with the state and international capital, both of which are more intolerant of change than ever (Ake 1994: 23).

In a similar vein Singh (2001) draws a useful distinction between transformations which denote the 'repositioning of higher education to serve more efficiently

as the “handmaiden” of the economy’ and transformations that seek to ‘align higher education with the democracy and social justice agenda or a new polity’.

The higher education context reviewed here has profound implications for the changing meaning and understanding of academic freedom in Africa, as well as for the development of instruments and mechanisms for the protection and advancement of academic freedom. The disparate interests of the various stakeholders outlined above are the basis for a number of contemporary contestations over the future of African higher education, the outcomes of which are likely to have profound impacts on the capacity and direction of continental knowledge production and the quality of Africa’s intelligentsia. Academic freedom, social responsibility and institutional autonomy are crucial prerequisites for the emergence of a regionally relevant, vibrant and dynamic intellectual culture, without which Africa’s participation in the world is likely to continue to be marginal and vulnerable to exploitation by external forces and interests. This increasing contestation – and the inseparability of academic freedom from broader political and economic challenges facing Africa – provides the major rationale for reviewing the existing instruments designed to advance and protect academic freedom in Africa. This task can only be meaningfully undertaken in full cognizance of the global changes that have occurred over the past decade or so and the manner in which they may have affected the prospects for advancing academic freedom and institutional autonomy, not to mention sustaining the social responsibility of African intellectuals.

Academic Freedom in Africa

In the early years of independence Kwame Nkrumah may have been the first to link academic freedom with social responsibility. He did so within a nationalist and anti-imperialist paradigm that was not welcomed by the departing colonialists: ‘no resort to the cry of academic freedom (for academic freedom does not mean irresponsibility) is going to restrain us from seeing that our university is a healthy university devoted to Ghanaian interest’ (cited in Mkandawire 1999). At the time national interest was more easily assumed to be the same thing as public interest, and the state was assumed to be the main expression of both. Today the state, while still the major source of funding for higher education, is no longer uncritically assumed to represent the public interest in Africa. Indeed, during the 1980s and 1990s, the state was more easily identified as a major culprit perpetrating abuses of academic freedom (Diouf and Mamdani 1994).

Today however international economic doctrines have so undermined the capacity of the state that the very meaning of national sovereignty is being

debated. More specifically the state has been obliged reduce funding to an extent that now constitutes the main obstacle to the pursuit of academic freedom. It is in this context that the feasibility of the existing provisions for academic freedom in Africa have to be revisited. Are the existing instruments still adequate? How is higher education reform affecting their viability? How might they be developed and implemented to ensure that they are effective in a contemporary scenario in which the earlier constraints of state repression and censorship have largely been superseded by constraints arising out of the implementation of international economic doctrines? The Kampala Declaration and the UNESCO Recommendations are the two key instruments to be reviewed from this perspective.

The Kampala Declaration 1990

The African scholarly community has built on the historical understanding of the importance of a locally attuned and adept intelligentsia to develop a distinct regional approach to academic freedom, which the Kampala Declaration seeks to reflect. A key concern expressed at the conference that gave rise to the Kampala Declaration was the need to develop an African perspective that would address the highly challenging conditions facing African academics. This centred on affirming the link between academic freedom and broader societal freedom. Academics were clearly defined as being entitled to their freedom only insofar as the struggle for academic freedom is coupled with popular struggles and imbued with social responsibility towards those struggles. Academics were located within broader definitions of intellectual life which include the social, cultural and religious life beyond the academies.

Academic Freedom was explored along five main themes, each of which refer to particular stakeholders:

- the state and academic freedom
- civil society and academic freedom
- the intelligentsia and academic freedom
- donors and academic freedom
- the social responsibility of intellectuals (Oloka-Onyango 1994: 338).

A great deal of attention in the Kampala Declaration was directed at the African *states*, largely on the basis of extensive evidence of intimidation, harassment and elimination of academics by intolerant and authoritarian regimes. Articles 13-18 nonetheless focus on the obligations of the state, requiring that the state respect and protect academic freedom, desist from deploying armed forces on campuses, desist from censorship, allow free movement of academics across borders and ensure continuous availability of funding for research

and higher educational institutions. Institutions of higher education are required to be autonomous and democratically self-governed by the academic community.

Discussions regarding the role of the intelligentsia and the rights of intellectuals were extensive. The first nine articles of the Kampala Declaration address the rights of intellectuals to education, to participation in intellectual activity, to all the civil rights contained in the International Bill of Rights and the African Charter on Human and People's Rights, to work without harassment and intimidation, to freedom of movement and association, to self-governance, to freedom of expression and to security of tenure. There is no specific mention of the right to freedom from gender, ethnic, class or religious discrimination, or to equal treatment within academic institutions. The declaration refers to an abstract "African intellectual" which a generous interpretation could take to include women and members of other marginalised groups. The declaration is inconsistent with regard to the use of gender-inclusive language, and there is no acknowledgement of the gross under-representation of women and other marginalised groups in the academy, or of the extent of gender discrimination, sexual harassment and abuse that occur within the academic community.

There were also many self-criticisms addressed to the conservative reliance on imported Western paradigms, disciplinary constraints and undemocratic academic organisational structures, all of which are viewed as reproducing rather than challenging the social divisions and hierarchies constraining African societies. It was argued that this has led African intellectuals to reproduce rather than challenge inequalities based on gender, class, ethnicity and other dimensions of oppression. The discussions on social responsibility were extremely wide-ranging but coalesced around the need for Gramscian-style "organic" intellectuals, that is, intellectuals rooted in popular struggles for democracy and social justice. No less than six articles in Chapter III of the declaration address the building of social responsibility in and beyond the academic community. However there is no specific acknowledgement of the widespread effects that religious, ethnic, class, gender and other discriminations have on the possibility of academic freedom. Instead a general resolution calls on the intellectual community to ensure that differences are resolved "in a spirit of equality, non-discrimination and democracy". In terms of civil society there was much discussion of the relationship – or lack of relationship – between academics (often viewed as part of the state) and social movements, including women's movements. The contradictory nature of civil society was raised in the context of cited instances in which religious bodies have taken

over the surveillance and repression of academics, notably in North Africa, where the Islamic fundamentalist movement targets academics for intimidation and elimination.

The role of donors was posed as a duality between the protective role that financial and material assistance offers on the one hand (and the independence that this provides in terms of the scientific agenda) and, on the other hand, their own interests in particular brands of developmentalism. The need for financial autonomy in sub-regional and regional centres was clearly identified as an *a priori* condition for maintaining intellectual autonomy. Very little attention was given to, and none of the resolutions deal specifically with, the influence of international financial institutions on the higher education arena or the manner in which the “market forces” that feature so powerfully in global economic doctrines may affect the prospects for academic freedom.

In conclusion we can see that neither the deliberations of the Kampala Conference nor the Kampala Declaration itself fully anticipated the extent or impact of globalisation, the diminishing role of the state and the ensuing marketisation of higher education. They only partially anticipate the development of repressive civil society forces that have also played a role in constraining academic freedom (notably in Algeria). The increasing fragmentation of the intellectual community has made it more and more difficult to discern a unified African intellectual community with a coherent agenda for the future of higher education and academic freedom. Instead old and new dividing lines have emerged to further disempower an African intelligentsia whose marginalisation looks set to continue into the twenty-first century.

The UNESCO Recommendations on the Status of Higher Education Teaching Personnel 1997

This document has its origins in the 1966 Recommendations Concerning the Status of Teaching Personnel, which focused on primary and secondary school teachers. It follows a similar format, setting out the educational objectives and policies governing higher education in the member states and the minimal conditions necessary for the maintenance of higher education teaching as a profession. The main substantive differences between the Kampala Declaration and the UNESCO Recommendations are due to the fact that the latter is organised within a global framework, rather than an African one. As such, although it was signed seven years after the Kampala Declaration, it does not specifically attend to the major features of the contemporary African context, namely the intense economic and political crises of the 1990s. Nor does it attend to the constraints imposed on public funding of higher education by the unfavourable political conditions of authoritarianism, instability and conflict, or the

intensely constraining macro-economic policy environment of structural adjustment programmes. As the situation analysis indicates, the political economic and institutional conditions of the African region have major implications for the status of teaching personnel and the prospects for academic freedom, institutional autonomy and social responsibility.

The UNESCO Recommendations set out core educational objectives and policies, notably the principle of public accountability regarding the expenditure of public funds on higher education, and the need for measures to ensure that teaching personnel are adequately provided with the necessary means to carry out their professional duties. The identified means include a list of items that are worth noting, if only because of their absence, or at best inadequacy, in many African tertiary institutions. Access to up-to-date libraries, the encouragement of research, publication and dissemination of research results, opportunities to travel and to participate in local and international scholarly gatherings, to take salaried sabbatical leave, and the right to maintain communications and contact between institutions and associations as well as between individual personnel have become distant memories for most, possibly the majority, of African academics.

The specified rights of higher education teaching personnel include the basic freedom to determine the curriculum, to carry out teaching, research and publication without interference, to freely express opinions and to undertake professional activities outside of their employment, insofar as these do not impinge on their duties within their home institutions. This clause recognises the need, if not the value, of academics engaging in activities beyond the campuses, but in many African contexts poor salaries present academics with little choice. In such a situation the extent of off-campus income-generating activities may well compromise the execution of duties within home institutions. Ensuring the maintenance of professionalism also becomes more difficult too, once the terms of employment have deteriorated below a certain level. There are extensive recommendations regarding the terms and conditions of employment (Section IX, 40-72). These address entry into the profession, security of tenure, appraisal systems, discipline and dismissal, collective bargaining and negotiation of terms and conditions of employment, salaries, workload and benefits, as well as the right to study and to research leave and annual holidays. The effects of the economic conditionalities of the 1980s and 1990s severely compromised many of these terms and conditions, and the likely effects of reform processes clearly deserve further exploration and analysis.

When it comes to equity and social justice considerations, the UNESCO Recommendations are more advanced than the Kampala Declaration. This has particular relevance to African contexts, where the broader conditions are such

that inequalities and unjust practices continue to be very pronounced. There are specific clauses relating to affirmative action, now widely accepted as a necessary strategy to promote the entry and advancement of historically excluded groups. The promotion of equality of opportunity and treatment of women is addressed in clause 70. There are also specific provisions regarding disabled people (clause 71) and part-time employees.

Structures for Monitoring Observance and Non-Observance

The efficacy of both instruments critically depends on committing resources to communication and promotion of the instruments, and to effective implementation and monitoring. The final paragraphs of the UNESCO Recommendations request the Director-General of UNESCO to prepare a comprehensive report on the world situation. The Joint ILO/UNESCO Committee of Experts on the Application of the Recommendations concerning the Status of Teaching Personnel (CEART) is identified as the main body responsible for monitoring the UNESCO Recommendations. To this end the Executive Board of UNESCO and the ILO Governing Body both approved an extension of the CEART's mandate to include the monitoring and promotion of the 1997 UNESCO Recommendations in the course of 1999.

Two key issues arising from this mandate have been, first, deciding what methodology to adopt and, second, what substantive issues to prioritise. It has been agreed that CEART's work should be based on reports from governments, national organisations of teachers, international NGOs and studies and reports of the ILO and UNESCO. CEART has offered the Director-General of UNESCO guidelines for following up on the report that is to be prepared. This essentially advises the use of existing organisations in the preparation of case studies in developed and developing countries as a means to identifying models. Two phases are suggested, the second of which is due to be completed in 2007, and so the full results are not yet available.

The UNESCO Recommendations also call upon both member states and individual higher education institutions to take 'all feasible steps to extend and complement their own action by encouraging co-operation' with and among relevant governmental and non-governmental organisations, but what such action might be is left undefined and open to interpretation. At the time of writing, the extent to which African education ministries and universities have in fact pursued the matter is not clear. However, the low level of reporting on observance or non-observance suggests that action has been extremely limited. It would appear that little has been done to ensure observance and/or that there is an almost complete lack of reporting on this.

Legally it has been suggested that the enforcement of academic freedom could be carried out under existing human rights legislation. However the limits of the law as a tool for social and institutional change have been well documented. The main concerns arise out of the highly limited access to legal services and information and the constrained nature of legal definitions based on the notion of a rational individual citizen, rather than on a notion of collective rights or social justice. Yet the broader challenge appears to be one of awareness and the capacity to make use of the existing provisions for the protection of academic freedom. Reporting is limited to extreme cases and defined within a human rights paradigm. Clearly restrictive definitions of the goal and purpose higher education can be deployed to constrain academic freedom according to disparate and increasingly contested stakeholder interests.

For its part the Kampala Declaration has only two articles pertaining to implementation. Article 25 states that ‘academics may further elaborate and concretize the norms and standards set herein at regional and pan-African level’, while Article 26 notes that it is ‘incumbent on the African intellectual community to form its own organisations to monitor and publicise violations of the rights and freedoms stipulated herein’. To this end CODESRIA has established and maintained an Academic Freedom Unit. This was the main institutional site through which the state of academic freedom in Africa was monitored during the years following the Kampala Declaration (CODESRIA 1996). The first report indicated the ongoing severity of the conditions facing African academics and noted the urgency of continued monitoring and action to defend academics against tyranny. Many of the examples cited below are drawn from this report.

Additional monitoring has been carried out by international human rights NGOs such as Human Rights Watch, Amnesty International and the Network for Education and Academic Rights (NEAR). In the USA an independent committee, the Committee for Academic Freedom in Africa (CAFA), was established in the 1990s at the initiative of African academics who had found it necessary to relocate because of deteriorating conditions at home, along with North American colleagues critical of the global domination of higher education by international financial institutions based in Washington.

Prerequisites for Academic Freedom in the Twenty-First Century

The most general finding that even a cursory reading of any of the above documents reveals is that the basic economic and institutional prerequisites for the existence of a healthy and vibrant academia, not to mention academic freedom, are not in existence in many African countries and institutions.

Furthermore, there is an urgent need to examine the higher education reform process from the specific perspective of academic freedom. It makes little sense to discuss academic freedom in Africa without grounding the concept in the stark realities of regional contexts. Conditions differ widely, creating great variability in the constraints on academic freedom in different parts of the continent. For example, South Africa's elite institutions enjoy very different conditions compared to those prevailing in historically disadvantaged institutions, and both are very different from the universities in Rwanda, Somalia, Liberia, Sierra Leone or Gambia. The history and experience of academic freedom reflects this diversity.

Adequate Financing of Higher Education

Both the Kampala Declaration and the UNESCO Recommendations indicate the necessity of an adequate material base for academic life. The Kampala Declaration calls upon African governments to ensure adequate funding (Article 17) and, while the UNESCO Recommendations do not address core funding directly, they call upon member states to 'encourage aid programmes' for developing countries in order to mitigate the mass exodus of academics by assisting 'in sustaining an academic environment which offers satisfactory conditions of work for higher education teaching personnel in those (developing) countries'. However many of the higher education reforms that have been underway in recent years have been driven by financial considerations into adopting an approach that works against public funding and undermines public accountability of higher education systems. Furthermore public funding has always been the bedrock of education systems worldwide. The global trend towards the marketisation of higher education is a complex set of processes that are differently engineered in different African countries and about which there are many views which cannot be adequately reviewed here. But what is clear is that marketisation undermines the economic prerequisites for academic freedom and social responsibility. There needs to be a concerted effort to reconsider higher education reform from this perspective and to address the implications of marketisation for intellectual and research development and diversity, for institutional cultures, for institutional autonomy and for social responsibility and social justice considerations. All of these are differently configured in private institutions and by the use of cost recovery, corporate financing and other measures that seek to compensate for diminishing public financing.

While dependence on the state poses its own constraints and freedoms, the new reliance on external financing for key prerequisites for the exercise freedom – for example, academic gatherings, collegial networking and associations –

makes academic freedom vulnerable to the exigencies of donors. The prospects of securing an adequate material base cannot realistically be separated from national political economic circumstances. As neither development aid money nor private corporate interests offer any substantive means for financing higher education elsewhere in the world, it seems fair to question why this is expected to be a feasible alternative to public funding in the dependent and impoverished economies that characterise the African landscape.

Favourable National Political Conditions

Major changes have occurred in many countries, notably with the transitions away from military dictatorship and towards multipartyism (in Nigeria, Kenya, Ghana, and a host of others). Both civilianisation and the introduction of party politics can be seen as national political responses to the demands of broad-based social movements which have pursued social justice and democratisation agendas. The extent to which direct repression and intimidation are reduced by these developments deserves to be properly assessed. In other nations civil disturbances and armed conflicts have seen institutions of higher education either destroyed completely or deprived to such an extent that there is little capacity for any academic activity (for example, in the Democratic Republic of the Congo, Somalia, Liberia and Sierra Leone). In the case of Rwanda a large proportion of the intelligentsia were eliminated during the genocide, creating dire capacity problems for those now seeking to rebuild and indeed develop new initiatives in the higher education sector.

On the favourable side the broader context of the last decade or so has seen a continuation of the trend towards political democratisation and greater respect for fundamental human rights and gender equality, at least formally, in many countries. Academics may be less likely to face imprisonment or official harassment in the emergent democracies of the last decade or so. However there are also countries in which the structural semblance of democratisation has given way to renewed authoritarianism, with improperly elected or appointed leaders operating in full complicity with the logic of market fundamentalism. In such contexts there is almost complete compliance with a reform agenda that continues to undermine the public financing of public education and diminishes the state's capacity to sustain and protect public higher education and attendant academic freedoms and social responsibilities.

Institutional Autonomy

Both the Kampala Declaration and the UNESCO Recommendations identify institutional autonomy as a necessary condition for academic freedom. However institutional autonomy is still compromised in many African nations where

the state controls the appointment of university leaders. However there have been some improvements in the context of political transitions. For example, in Nigeria, the 1998 transition to civilian rule led to the withdrawal of the Sole Administrators imposed on several universities by the military. In Uganda the NRM government has recently accepted that the president should no longer appoint the vice-chancellors of the national universities, and an independent search committee comprised of senior faculty has now been appointed.

Acceptable Employment Conditions

Both the Kampala and UNESCO instruments correctly identify security of tenure as a minimum prerequisite for the exercise of academic freedom. Yet security of tenure is increasingly threatened by higher education reforms that include a greater reliance on contract lecturers, the exploitation of student assistants and other strategies designed primarily to cut costs. As has been noted, 'such an environment has resulted in the comparative growth in non-tenured or contract positions and, to some degree, the "casualisation" of higher education employment' (ILO/UNESCO 2000: 49).

Clearly the implications of this erosion of tenure need to be examined, not least because casual employees are more vulnerable to censorship by their employers, as well as to self-censoring their work in order to secure further contracts. This has major implications for research, as the continuing deterioration of African research output indicates. Research activity has become increasingly reliant on consultancies carried out on behalf of funding agencies, rather than in pursuit of locally defined research interests and agendas. Meanwhile the dearth of opportunities for collegial interaction and networking, along with the limited access to decent libraries, academic journals and other publications have not been offset by the introduction of the worldwide web, which is also limited on most African campuses. In practical terms the demands of academic careers have proliferated in ways that are increasingly incompatible with time for the research and reflection essential to good quality intellectual production. Sabbatical leave, for example, recognised within both instruments as a precondition for academic freedom, has virtually ceased to exist in many institutions. Where it does still exist, it seldom serves its original purpose. Instead financially deprived faculty members find it necessary to use their sabbaticals to pursue income-generating activities or to seek more viable career opportunities abroad. They may also have to self-finance their sabbatical leave and find funds to cover their own replacements. Research production has become harder and harder to sustain, the commendable efforts of various continental and sub-regional networks notwithstanding.

These deteriorating employment conditions have fuelled the international out-migration of African academics and, for example, the non-return of over 42 percent of Africans who depart to the USA for doctoral study. The mass emigration that has occurred has been compounded by localised drainage of a different kind. The non-viability of academic careers has seen would-be professional academics engaging in a multiplicity of entrepreneurial activities, not all of them scholarly, both on and off campuses.

Support Services

The out-sourcing of many support services formerly provided by workers employed within public institutions to private companies has made it increasingly difficult to prevent abusive and exploitative practices. More importantly, subjecting such support services to the demands of profitability clearly affects both provision and affordability. Where the services concerned are those that women are disproportionately reliant on, out-sourcing is likely to affect the conditions enabling women to take up employment in higher education institutions, thus undermining the possibility of greater gender equality in the workplace.

In short the ongoing economic crisis and the global macro-economic responses to this have ensured that Africans are not guaranteed the right to pursue higher education, while academics have found themselves increasingly deprived of the most basic academic freedom – namely the right to pursue viable academic careers in their own countries or on their continent. The depletion of the employment conditions resulting from inadequate financing and deteriorating institutional and employment conditions, as well as the weakening of the national capacity to protect and strengthen higher education institutions, have created new challenges for academic freedom and have accelerated the brain drain.

While there have been significant advances in technology and improvements in the efficiency of university governance and administration, there is still little evidence that these much-lauded aspects of higher education reform have sufficiently enhanced the a priori conditions for the observance of academic freedom. The effects of the contemporary constraints for the quality of training and for the broader agenda of knowledge production have been profound. Such broad changes in the environment demand a radically different approach to academic freedom that takes it far beyond the realm of traditional jurisprudence and individualised protection into the public realm of social and collective rights and freedoms, and the need for various forms of public action for their defence.

Observance and Non-Observance

The previous discussion advocates a re-conceptualisation of academic freedom which goes beyond the previous focus on direct harassment by various parties and moves into an engagement with the economic and institutional conditions within contemporary African universities. However the existing information on observance and non-observance is limited to the existing thinking as it is reflected in the two CODESRIA and UNESCO instruments. There is therefore a profound sense in which the reporting on abuses of academic freedom has been overtaken by events. This means that the technical questions about each instrument and the quest for indicators and methodologies that might be used to monitor and ensure observance have been overtaken by contextual changes. The instruments themselves need to be reconsidered along with the development of strategies for monitoring their efficacy. The available information at the present time should therefore be viewed bearing in mind the fact that it has been gathered on the basis of the traditional understandings and the key players identified during the 1980s and 1990s. The material present below therefore considers the abuses by the usual players – the state, the university administrations, the African academic community and the variously represented public and civil society interests. In view of the contextual changes discussed here, I also consider aspects of non-observance arising out of the emerging conditions, that is, emanating from the absence or erosion of the already-identified preconditions for academic freedom.

Non-Observance According to Conventional Understandings

This refers to actions and practices that directly constrain academic freedom such as:

- harassment, intimidation, execution/assassination, detention, censorship, seizure of documents, etc. by various state agencies, campus occupations, closures or intrusions into the governance and administration of the university
- harassment, intimidation, execution/assassination, attack and abuse by civil society groups
- expulsions, sackings, threats and intimidation of students and faculty by university authorities
- failure to protect staff or students from harassment, intimidation, attack and abuse by other members of the university community.

All these have continued to occur. The 1996 CODESRIA report is replete with examples of all the above-listed direct non-observances, as are other reports on

human rights violations in Africa during the recent period. Clearly the national political trend towards greater democratisation has a long way to go in terms of academic freedom. There are some promising cases of increased institutional autonomy (Uganda and Nigeria have been noted) and, in some countries such as Nigeria, Kenya and Ghana, the level of direct state intervention has decreased. In other countries, however, the head of state is still chancellor of the public universities, and has the right to appoint vice-chancellors. Intimidation, seizures of documents, arbitrary arrests, bannings, withdrawal of travelling documents and non-issue of visas, campus occupations as well as closures and staff dismissals still occur frequently.

Some documented examples of non-observance by the state include the following. Professor Niyi Osyundare was prevented from travelling to South Africa in 2002 when representatives of Nigeria's civilian government seized his passport. The Kenyan government did not issue visas to the Nigerian delegation invited to attend the international Conference on Innovations in Higher Education in Nairobi in 2002. Kenyan academics and students are required to obtain official clearance to travel outside Kenya. They start with their head of department, then with their dean of faculty, the principal and finally the vice-chancellor. When all that has been obtained, official government clearance must then be obtained from the Ministry of Education and the Office of the President. Saad Eddin Ibrahim, a prominent Egyptian sociologist and critic of the government, went on trial for reporting on elections in October 2000, accepting foreign funds without authorisation and a charge of embezzlement. On 21 May 2001, Ibrahim and twenty-seven of his colleagues from the Ibn K̄jaldun Centre for Development Studies were convicted. Ibrahim was sentenced to seven years in prison, and six others (including two women) were given custodial sentences of between two and five years. Ethiopian security forces used excessive force to deal with student protests in April 2001. At least forty people were killed. Eyewitnesses reported that live ammunition was fired at protesters and that unresisting bystanders including children were beaten. Over 2,000 students were detained and an unknown number have remained in jail. In Eritrea student protests against the conditions in the camps accommodating them during a compulsory summer work programme. Semere Kesete, the president of the Asmara University Student Council, was arrested and jailed without charge on 31 July. On 10 August, 400 students protesting Kesete's arrest were rounded up and sent to a work camp in the desert, and 1,700 more were later taken to join them. The government acknowledged that at least two died of heatstroke. Some parents of the resisting students were also arrested. The University of Abidjan, Côte d'Ivoire has been subject to frequent closures and

occupations by the security forces, often without any request from the university authorities. Public universities in Kenya have seen frequent closures, ostensibly to deal with students expressing views considered to be anti-government, usually accompanied by expulsions of student leaders. Over 500 Nigerian students and staff were said to have been victimised for their political views in at least five of the country's thirty universities between 1985 and 1993. The relationship between the Academic Staff Union of Universities (ASUU) deteriorated to a situation of running battles between the military and its appointed vice-chancellors on the one hand and the ASUU on the other. ASUU members became the target of endless instances of harassment, incarceration without trial ("preventative detention") and purges, with concerted attempts being made to bribe and displace the leadership. In 1990 the Nigerian government endowed the Minister of Education with the power to sack academics from any university in the country. The government has sent the police onto the University of Zimbabwe campus on numerous occasions between 1996 and the present time, where they have deployed tear gas and rubber bullets to disperse and terrorise students. This destabilisation has resulted in frequent and sometimes lengthy closures of the university.

Some documented examples of non-observance by university administrations include the following.

The government-appointed vice-chancellor of the University of Abuja, Professor Isa Mohammed, engaged in a variety of despotic practices and, when challenged, had no hesitation in declaring his total authority when he said, 'I am the law'. Many Nigerian academics have been summarily dismissed from their jobs, while others have opted to leave after threats and intimidation. Academics in Usman Dan Fodio University have been subjected to harassment and intimidation by the university authorities. In 1998 Dr Jibrin Ibrahim, a political scientist at Ahmadu Bello University, was sacked. After various advocacy efforts and legal representations to the Sole Administrator of the day he was reinstated but left the university to work for an international agency shortly thereafter. The Chair of African Studies, Professor Mamdani, was suspended from the University of Cape Town in 1998 during a controversy over the curriculum content in African Studies. He was subsequently re-instated but resigned from his tenured position and emigrated to the US shortly thereafter. Unauthorised meetings and gatherings are proscribed on many campuses. On other campuses such meetings invoke intimidation and surveillance from the "campus protection services", as has been experienced on a number of South African campuses in the aftermath of a major out-sourcing of service workers which has generated new workers' organisations. Expulsions, non-graduation, and missing records are incidents which are hard to monitor as they are generally carried out against student leaders and activists

and critics under an official pretext. Sometimes these are linked to the non-accommodation of demands for sexual favours. Non-promotion, non-availability of opportunities for further education and training and other constraints have been imposed by senior colleagues as a result of an increasingly constrained and competitive institutional environment, peer envy and discriminatory values. Financial extortions perpetrated against students include the practice of lecturers compelling students to purchase photocopies from them or fail their courses and the widespread extortion of sexual favours from female students on campuses in Nigeria, Cameroon and elsewhere. Non-payment of salaries for long periods often compounds the prevalence of extortion and other corrupt practices, as lecturers grow increasingly desperate to ensure their own economic survival.

Challenges to academic freedom from civil society often arise from the increasing levels of intimidation and violence being perpetrated by civil society groups. In Algeria, for example, numerous academics have been assassinated and many others attacked and intimidated by Islamic fundamentalist groups. In Nigeria on-campus student organisations commonly referred to as “cults” impose regimes of intimidation and terror that affect the academic freedom and security status of students and faculty. The Dar es Salaam case cited above was orchestrated by a student group, as was the assault on Dr Phiri reported below. The reticence or complicity of university administrations in dealing with such groups seems to warrant further investigation.

Some additional examples of non-observance by civil society include the following. In March 2001, Khedija Cherif, a sociologist at the University of Tunis and a prominent women’s rights advocate, was attacked by a group of people. She was beaten, sexually harassed and verbally abused. Also in 2001 unidentified assailants attacked Abdel Kader Ben Khemis, a professor at the University of Sousse, who is known for his critical views. In the single year 1993-1994 at least twenty intellectuals were assassinated in Algeria. Some of them were publicly executed as a warning to their colleagues, and this campaign of violence and intimidation has continued, largely displacing the state repression of the previous era. Cults on the Nigerian university campuses at Ibadan, Ife and Benin have used rituals and acts of intimidation to inspire fear into the hearts of faculty and students alike.

Non-Observance Due to Deterioration of the Prerequisites for Academic Freedom

It has become increasingly clear that it is unrealistic to isolate the protection of academic freedom from the broader struggles for democracy and social justice, struggles that go well beyond the liberal individualism and legalistic un-

derpinning of traditional human rights discourses. In this context the articles concerning the obligations of the state deserve reconsideration. To what extent is it feasible for African states to resist the logic of international financial institutions in order to ensure adequate funding for research institutions and higher education? Clearly this would, at a minimum, require serious pressure from civil society and the African public, possibly in the context of national and sub-regional public debates that might lead to a re-commitment to public education. How far can regional and national mobilisations be effective in the context of globalisation and the related impact of an externally driven and financed higher education reform process?

The global trend towards “financial diversification” of tertiary education seems likely to exacerbate rather than reduce existing patterns of exclusion and inequality and to diminish the possibility of honouring commitments to equality and public accountability, both locally and globally. Higher education reform is an integral aspect of globalisation. With the world market for educational services exceeding 30 billion dollars, it is not surprising to find free trade advocates engineering the inclusion of education in the General Agreement on Trade in Services (Altbach 2003). The same source notes that the USA is already a major exporter of educational services, and benefits enormously from the 547,000 foreign students attending higher education institutions in the USA, as they contribute approximately 11 billion dollars to the US economy each year.

Needless to say, African higher education institutions are poorly placed to compete with the largest and most diverse higher education systems in the world. The reduction in public funding exacerbates the deteriorating situation, and the brain drain is a direct reflection of this fact. Furthermore there is little evidence that the limited partnership arrangements between US and African institutions effectively benefit African partners and some evidence to the contrary (Samoff and Carroll 2002). The emergence of private colleges and universities has been facilitated by a combination of national conditions (rising demands and shrinking public provision) and the globalisation of higher education now manifesting not so much through international academic exchanges and collaboration as through the reform process.

Longstanding inequities of access seem likely to be compounded by financial diversification (cost recovery, removal of subsidies and out-sourcing of services). Growing poverty mediates and exacerbates existing patterns of privilege and under-privilege, thus militating against the emergence of more egalitarian collegial cultures. The increasingly fragmented nature of academic life poses certain challenges, as does the prevailing culture of competitiveness augmented by scarce resources and growing competitiveness. The changing institutional

environment continues to sustain corrupt, harassing, domineering and oppressive behaviour.

With regard to the observance of gender equality, discrimination takes direct and indirect forms. It can be argued that all of these constitute non-observance of women's right to academic freedom, particularly of the UNESCO Recommendations' provisions for gender equality. However, where gender discrimination continues in systemic manifestations, it also functions more pervasively and elusively as an aspect of the overall conditions that prevent observance. In other words, the abuse of academic freedom through gender dynamics should not be limited to consideration of extreme instances of rape, abuse, proven cases of discrimination in promotions and the like. The broader picture is a more mundane one in which observance is hindered simply by the inherent logic of male dominated institutional cultures.

Institutional and administrative tolerance of sexual abuse is one of the more negative and extreme features of African universities, one which clearly works to re-inscribe women's subordination and diminish the prospects for equal treatment. The non-protection of students and staff leaves them open to harassment and intimidation. A case in point is that of Isabel Apawo Phiri during her tenure at Chancellor College in Malawi. Dr Phiri undertook a research project whose findings suggested that women students experienced a high incidence of rape and sexual harassment by peers and lecturers, both on and off the campus, and that most of this went unreported. The dissemination of her report and radio coverage of her findings provoked a campaign of refutation, harassment and intimidation. Her house was attacked and damaged. The university administration failed to offer her alternative accommodation in the face of threats to burn down her home and issued a statement that more or less blamed her for the incident. Her findings were disputed, and she was subjected to intense hostility from many colleagues. The head of the law department was among those who objected to her treatment and who demanded that measures be taken to deal with these serious violations of academic freedom. Dr Phiri was obliged to hire a lawyer to seek compensation and subsequently applied for leave to recover from her ordeal. She subsequently left her position to take up employment elsewhere. A second well-known instance of non-observance through failure to offer adequate protection against sexual harassment is that of Levina Mukasa, a student at the University of Dar es Salaam who committed suicide after enduring a lengthy campaign of intimidation and abuse after she refused a relationship with a male student.

While sexual abuse and harassment of women students may not fall into the received definitions of academic freedom, it is clear that institutional tolerance of such behaviour mitigates against expressed commitments to fair

and just treatment and should be regarded as one of the factors responsible for the persisting under-representation and marginalisation of women in African higher education. Women faculty, particularly those at junior levels, are also subject to unwarranted sexual attention and may find their career advancement affected. The prevailing gender norms and values allow male students, lecturers, and members of the general public to take advantage of the situation with few qualms and little threat to their careers, while women are negatively marked and affected (Pereira 2002; Manuh et al. 2002). Concerted monitoring of sexual harassment and abuse has only recently been undertaken at some universities, notably through the activities of the Southern African Network of Tertiary Institutions Challenging Sexual Harassment and Abuse, established in Gaborone in 1996. A review of the evidence on gender inequality and sexual abuse in African universities indicates clearly that the efforts to build a just and egalitarian intellectual community still have a very long way to go. Given the rising HIV infection rates on many campuses (especially in Southern Africa) and the rising presence of AIDS itself, there are now additional concerns around the prevailing sexual politics within campus cultures. Neglecting the dynamics of gender and sexuality not only threatens the academic freedom of individual women and men but goes much further to threaten the lives of students and faculty alike (Kelly 2003).

The new regulatory systems and procedures introduced into higher education also deserve scrutiny from the perspective of academic freedom. Academics are expressing concern over the implications of the new performance appraisal systems, not least because these tend to foster external (Western) over-determination by adopting Western measures of excellence. For example the adoption of the Citation Index as a measure for rating African scholarship has obvious implications for intellectual autonomy and directly undermines the national political commitment to locally produced scholarship addressing local concerns and research agendas. Neglecting the scholarship of local and continental colleagues in favour of relatively distant Western sources is already a commonplace form of self-censorship that compromises continental intellectual development, in favour of Western recognition, regardless of relevance to local and/or regional concerns. This is clearly undesirable, yet it is already becoming institutionalised as a necessary practice for any African scholar seeking promotion.

Effects of Non-Observance on Knowledge Production

Non-observance resulting from the continued deterioration of conditions in higher education institutions has affected both the quantity and the quality of

scholarship and research produced by African academics. While some of these issues were flagged at the Kampala conference, they were not nearly as salient then as they have since become. Meanwhile Africa's contribution to global scholarship, research production and publication continues to deteriorate; the continent now relying increasingly on those who have migrated to more viable institutions in the West. More broadly, the non-viability of academic careers raises the alarming spectre of an even more denuded future as fewer and fewer of today's students even consider the academy a career option.

Within higher education institutions the professional role of academics is also diversifying, gaining additional functions that include self-administration in the name of efficiency. The development of new technologies has fuelled the assumption that support staff can be reduced in the name of efficiency, as personal computers and developments in telecommunications replace secretarial functions. At senior levels this role diversification often includes that addition of administrative, fund-raising and consultancy work. These additional activities create greater loading, but are increasingly being adopted as a necessary means of topping up departmental income deficits and maintaining teaching delivery. These additional demands deplete the time and energy available for teaching, not to mention knowledge production through research, in ways that deserve monitoring from the perspective of the freedom to carry out one's teaching and research duties under reasonable conditions of employment. The reliance on donor funds is highly undesirable, as it constantly risks compromising the emergence of national and socially responsible intellectual agendas in favour of donor agendas that often carry particular brands of developmentalism.

Just as academic freedom should be considered a necessary condition for knowledge production, so too is academic freedom severely compromised by the absence of African knowledge production. Scholars and analysts are forced to rely on imported knowledge and resources, much of it derived in contexts that may have little or no relevance to the pressing challenges facing Africans. Reliance on irrelevant resources, and being compelled to cite them in order to be published in accredited journals, can even retard the development of locally relevant theories and paradigms, thus compromising indigenous knowledge production. Those still struggling to find ways of continuing to carry out research often find themselves reliant on unequal partnerships with well-funded Western scholars or dependent on the generosity of donor agencies willing to fund research for their own reasons.

Conclusion

Broadly speaking, the situational update and analysis and review carried out here indicates that existing instruments do not fully or adequately reflect or respond to the major challenges facing higher education in Africa at the present time. To some extent they are limited by their liberal human rights orientation and the focus on the state both as an arbiter of freedom and as the major funder of academic institutions. This kind of generic approach to academic freedom may be insufficiently attentive to the changing context and to the marked local variations in conditions in the absence of local uptake and engagement with academic freedom in specific national and institutional contexts. However, it needs to be said that in the 1990s it would have been hard to anticipate the rapidity with which the new challenges of globalisation – and within this the marketisation of higher education – would gain ground during the last decade. Yet these are the major forces creating the need to re-think the meaning of academic freedom. Incorporating the implications of these changes for higher education into instruments designed to protect and advance academic freedom clearly requires substantially more work than a review such as this can undertake.

The present context is one in which it is more important than ever to devote serious attention to developing broader and deeper thinking about the conceptualisation, development and pursuit of academic freedom in African contexts. Never has the imperative to strengthen African intellectual life been stronger. The underdeveloped condition of the continent demands a much higher level of intellectual, strategic and creative capacity. Academic freedom is an essential condition for the development of a vibrant and socially engaged intellectual culture, and in African contexts the constraints range from the most overt to the most invidious forms of self-regulation and censorship, which appear to be gaining ground in the context of marketisation. It seems that in some ways the naked repression of undemocratic states has been largely displaced by the poorly substantiated and little understood logic of “market forces”.

The reflections that opened the Kampala conference in 1990 contained many prescient ideas which are still relevant. In particular the argument that academic freedom cannot be separated from social responsibility in African contexts remains pertinent, not least because of the growing importance of civil society in the context of the ongoing democratisation of many nations. New conditions create new challenges. Among these are the ongoing brain drain, the persistence of gender inequality, the emergence and spread of HIV/AIDS, the new technological advances and the new modes of administration, regulation and self-censorship, which have all been discussed here.

A gender analysis suggests that formal provisions have been inadequate and inadequately implemented. Despite the provisions for equity in both the Kampala Declaration and the UNESCO Recommendations, higher education institutions are still far from equitable. Despite decades of official pronouncements on the need to eliminate gender inequality, less than 12 percent of Africa's university faculty, and less than 3 percent of the professoriate, are women (Ajayi et al. 1996). Clearly more than declarations and pronouncements are needed to bring about change, even at the minimal level of access, not to mention equal academic freedom.

The call in the Kampala Declaration for the building of groups, associations, communities and networks, both within and across countries, assumes even greater significance in the present context, even though the challenges involved in establishing and maintaining such linkages remain intense. On the positive side the introduction of information and communication technologies has already facilitated the emergence of a number of new collegial and research networks across the region and enhanced the work of existing associations. The scope for using ICT both to pursue monitoring and the necessary strategising for the advance of academic freedom is substantial, but should not be overstated. ICT cannot overcome the need for time, resources and adequate means to support the development and replacement of specialised academic skills and expertise.

The above review and analysis reminds us that a well-grounded understanding of the meaning and possibility of academic freedom in African contexts is an indispensable pre-condition for the revitalisation of Africa's higher education sector. It is an integral reflection of the wider societal freedoms and responsibilities, which are being strengthened as Africa moves to embrace democratisation, peace and social justice for all in the twenty-first century. The securing and advancement of academic freedom is a basic prerequisite for the development of a vibrant continental intellectual culture, which draws on the diverse perspectives of the widest possible range of social groups and which can produce both the knower and the knowledge that Africa needs to think her way out of crises and move forward into the twenty-first century.

The following recommendations are a unified package which needs to be implemented as such in order to be effective.

- A more comprehensive revisiting and revision of existing understandings of academic freedom, as reflected in the Kampala Declaration on Academic Freedom and Social Responsibility, and the UNESCO statement. This should take full cognisance of contemporary challenges to public higher education, most notably the shift from the imperatives of the

state to those of the market and the implications for equity within higher education institutions.

- A broad programme of national and sub-regional activities designed to establish and reaffirm the public stake in higher education by establishing the connections between national agendas for democratisation, strong and unfettered intellectual capacity drawn from all sectors of the society, and the broad goals of sustainable, equitable and democratised development processes.
- The strengthening and protection of, and where necessary the establishment of academically free and independent, national, sub-regional and regional research and reflection centres dedicated to the reproduction of continentally grounded critical thinkers and researchers competent to identify and engage strategically with the major contemporary challenges to African development in key areas of policy specialisation.
- The re-establishment and support of an independent regional programme to monitor and report on academic freedom and to continuously affirm the link between academic freedom and social responsibility in the context of democratisation and the strengthening of secular civil society.
- The promotion of national, sub-regional and regional dialogues designed to strengthen broader awareness about the crucial importance of academic freedom and to build a wide social consensus at all levels of society and in the local and global policy establishment. In this regard ministers of education, UNESCO and other organisations should play a pro-active role in this mobilisation and popularisation effort, taking it as part of their official mandate and linking it to other aspects of the ongoing national and regional development and democratisation efforts.
- The greater recognition of the need for more attention to be paid to the creation of the basic, supportive environment necessary for academics to function in the first place as academics and then to promote their freedoms.
- The encouragement of countries to adopt policies that facilitate the cross-border movement of scholars in the knowledge that scholarly mobility and the ability to belong to, as well as exchange with, other scientific communities are integral to the promotion of the freedom of thought and academic freedom.

Notes

- 1 For example, the fact that primary teachers are produced in the tertiary sector seems to have escaped the attention of the basic needs advocates.

- 2 While these efforts are still in progress, some of the material from the four commissioned case studies has been included as a valuable source of information on the overall scenario with regard to the reform effort. The Ghana case study (Manuh et al. 2002) and part of the Nigerian case study (Pereira 2002) were procured from the researchers, along with discussions of the reform efforts in Uganda (Musisi 2003), and privatisation in Kenya (Murunga 2001). Efforts to procure the others from the Higher Education Partnership were ongoing at the time of writing this paper.
- 3 It is possible to discern a range of approaches among these various funding agencies, but a serious comparative study has yet to be carried out. Such a study would assist in assessing the prospects and options currently facing the sector.
- 4 AAWORD and the African Gender Institute are among those that articulate a perspective defined in terms of African women's interests expressed in the AGI's stated objective of 'building knowledges for gender equity.'
- 5 The 2003 retreat sponsored by the Ford Foundation provides an example (see Report of the Ford Foundation Retreat 'Visioning African Higher Education for the 21st Century').

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Globalisation and Internationalisation of Higher Education in South Africa: The Challenge of Rising Xenophobia*

Owen Ben Sichone**

Abstract

The internationalisation of university education globally has coincided with the opening up of post-apartheid South Africa to the world market, and the number of foreign students (along with other visitors to South Africa) has shot up very rapidly since 1994. As a member of the Southern Africa Development Community (SADC), South Africa has an agreement (the Education Protocol) with its partners to cooperate in the area of education and training. In the absence of a similar spirit of cooperation allowing for the free movement of citizens of the SADC region, however, the wishes expressed in the Education Protocol cannot be fully realised, and many African students studying in South Africa still have to navigate long and difficult bureaucratic channels to obtain student visas and study permits. In addition, they face an increasingly hostile and xenophobic public on and off campus. Their experience will not provide them with fond memories of their student days in South Africa. This paper advocates greater freedom of movement for migrant students as a means of social upliftment and greater pan-African cooperation.

Résumé

L'internationalisation mondiale de l'enseignement supérieur a coïncidé avec l'ouverture de l'Afrique du Sud post-apartheid au marché mondial, et le nombre d'étudiants étrangers (de même que d'autres visiteurs) s'est accru très rapidement depuis 1994. En tant que membre de la région SADC, par contre, le souhait exprimé

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** Head, Research and Publications, Organisation for Social Science Research in Eastern and Southern Africa (OSSREA), Addis Ababa, Ethiopia. Email: sichone@ossrea.net

par le Protocole de l'Éducation ne peut être réalisé, et de nombreux étudiants africains étudiant en Afrique du Sud doivent passer par des procédures bureaucratiques difficiles et longues pour obtenir des visas d'étudiants et des permis d'études. De plus, ils font face à un public de plus en plus hostile et xénophobe sur les campus et en dehors. Leur expérience ne sera pas l'objet de bons souvenirs de leurs années études en Afrique du Sud. Cette contribution milite pour une plus grande liberté de mouvement pour les étudiants étrangers comme moyen de promotion social et de plus grande coopération panafricaine.

Introduction

Today's African citizens, like people everywhere, want to benefit from a good education and find a decent job, but they also expect to be able to express their opinions, engage in political debate, question conservative cultures and break free from social constraints. If they are unable to meet these expectations in their own country, then they will seek to enter the labour market in societies where such opportunities are more available (Global Commission on International Migration 2005: 14). Mobility thus climbs to the top rank among the most coveted values – and the freedom to move, perpetually a scarce resource and an unequally distributed commodity, fast becomes the main stratifying factor of our late-modern or postmodern times (Bauman 1998: 2). The global elite (those who are cosmopolitan and liberal) will of course come from all nationalities. In the new universal cosmopolitan culture of the global tier of the world system, your ancestry and skin colour will be far less important than your education, your values and your travel plans (Shweder 2001: 170).

It is now something of a cliché that neoliberal ideology advocates free movement of capital, information technology experts, tourists and foreign investors but not of refugees, asylum seekers and unskilled labour. As the report of the Global Commission on International Migration (2005: 14) noted, many young people in Africa and other poor societies reject this limitation on the basis of a human rights discourse and, influenced by the same global mediascapes that are so essential for globalism and globalisation, insist on their right to be mobile. Shweder's vision of a new liberal world order is spot on in associating education with both social and spatial mobility and confirms influential sociologist Zygmunt Bauman's observation that mobility is the number one stratifying dimension (more important than race, class and gender) in our globalising world. Nevertheless it is difficult to imagine how cosmopolitanism would exist outside ancestry and skin colour, as Shweder suggests, in an increasingly paranoid world. Thus, although young Africans are stubborn about moving to Europe, the USA or even South Africa, their journeys and experiences, whether

happy or devastating ones, will depend very much on what their linguistic, racialised or religious heritage is.

In post-colonial Africa upward social mobility has been facilitated by access to schools and colleges that most nationalist governments promoted. One of the injustices of colonial rule was its system of what apartheid called “Bantu” education, denying colonial subjects access to schools and colleges and trapping them in poorly paid agricultural and industrial work, in menial jobs rather than mental labour and thereby conflating race, class and gender in ways that reinforced the racist stereotypes of the imperialist mind. Unfortunately there does not seem to be any basis for Shweder’s cosmopolitan vision other than wishful thinking. Maybe it is possible to escape race, class and gender, but any attempt to achieve this will depend on ancestry and skin colour as much as on education, values and travel plans.

I will suggest, in line with Bauman’s take on free movement, that access to university education is a particularly important means to individual and collective social mobility. By limiting young people’s right to education, free movement, work and settlement through security, visa and passport requirements, xenophobic governments are limiting access to better human security. According to the Commission on Human Security (2003: 135) international migration ‘reflects the growing interdependence among countries and people.’ Consequently the commission recommended a humane migration framework that would increase migratory opportunities and burden sharing among nations.

I argue that controlling the movement of people is a medieval device quite contrary to the basic philosophy of free capitalist competition, although very much in line with apartheid, the notorious South African system of racial oppression that worked to limit the movement of black people and keep them in rural slums euphemistically called “homelands”. The apartheid policy of Bantu education trained black South Africans to be part of the unskilled labour force whose cheap labour allowed the gold mines and farms to operate so profitably for so long. It is this same policy that is responsible for the chronic lack of skilled professionals that today prevents South Africa from matching the economic growth of countries like India or China, whose large pools of highly educated young people have allowed them to become competitive in today’s high-tech industries. As critics of hegemonic economic ideology have noted, there are many similarities between apartheid and neoliberal policies, and the notion of a global apartheid effectively and accurately describes the exclusionary practices of the market in denying the majority of the world’s population schools for their children, secure employment for the adults or freedom of movement as a basic human right.

During the “lost decade” of the 1980s the idea took root that poor African countries need not spend money on tertiary education. In a process that Chachage (2006) referred to as the irresponsibilisation of the state, African governments seemed easily persuaded to cut back on expenditure on education, which may have forced some students to leave their countries in search of higher education. In a World Bank-sponsored meeting of the African vice-chancellors in Harare in 1988, it was even claimed that Africa’s need for university education to fill white collar jobs could be met by overseas institutions, so that resources could then be channelled to primary, tertiary and vocational education. The assumption was that Africans were destined to remain unskilled workers for a long time. This was an expression of the position of the World Bank’s first African-specific education policy paper, *Education in Sub-Saharan Africa: Policies for Adjustment, Revitalisation and Expansion*. According to Chachage (2006), by the start of the new millennium, the World Bank (but not African governments) had changed their minds about cutbacks in education and were advocating increased education budgets. However the damage had already been done, and many African institutions are yet to recover from the shocks of under-funding.

The current global development agenda for reducing poverty (see the Millennium Project 2005: xiv) appears like a bureaucratic game when we consider that, although migration can contribute to the eradication of extreme poverty and hunger, priority is given to the production of poverty reduction strategy papers by the end of 2006! The call for more foreign aid and more open markets for tropical products seems designed to keep poor people in poor countries and to “contain” poverty as communism was once contained. Looked at in this light, the numerous economic and political development instruments produced by the Millennium Project appear like devices of apartheid, designed to keep poor people in ignorance and insecurity. Even post-apartheid South Africa itself is not free of the effects of global apartheid. Crime is blamed on international crime syndicates, and the government seeks solutions in isolationist “Proudly South African” nationalism. The ANC government tries to juggle this isolationism with a pan-African vision that places South Africa in a leadership role championing the cause of the continent’s rebirth by promoting development, democratisation and cooperation.

In Chapter Two of the SADC Protocol on Education one of the key principles is the need to relax and ultimately eliminate immigration formalities and facilitate freer movement of students and academic staff. In addition SADC officially promotes policies to create an enabling environment for appropriately educated and trained people to apply their knowledge and skills for the

development of the region. In line with this goal the South African Council on Higher Education (2000), in its report on higher education in South Africa, stated:

South Africa is not focusing sufficiently on promoting its higher education system internationally. There is immense potential to attract students from the southern African region, other parts of Africa and elsewhere without reducing efforts to expand access to South African students. An appropriate framework and infrastructure that draws in various relevant government departments should be created for this purpose and internationalisation should be promoted. International students must be specially catered for to ensure that they enjoy rewarding social and educational experiences. Enrolling students from the rest of Africa would be a means of contributing to their human resource development and giving expression to our commitment to African development and the African Renaissance. It would also be a source of revenue for institutions and the country.

In the absence of a spirit of cooperation allowing for the free movement of citizens of the SADC region, however, the wishes expressed above and in the SADC Education Protocol are not being fully realised. Many SADC students wishing to study in South Africa still have to engage in long and difficult bureaucratic negotiations for student visas and study permits. Although some political and business leaders see the advantages of internationalisation for South African skills development and for the country's desire to raise its prestige in global politics, the same cannot be said for the more nationalistic politicians and security officials who tend to equate internationalisation with social and health problems (Nyamnjoh 2006: 65-69). In a continuation of the well-established "laager" mentality of the apartheid era, many South Africans believe it is precisely by keeping out of Africa that their country can develop. The European Union, which seeks to develop special trade agreements with South Africa and exclude the rest of the continent, encourages this myopic view. Although the European Union is South Africa's leading trading partner, there is a lot of untapped potential for intra-African trade to generate future economic growth. This divide-and-rule strategy encourages the exceptionalism that many South Africans believe in and further promotes xenophobic tendencies towards the rest of the continent. Corporate South Africa knows better than the politicians the value of doing business in Africa, as is shown by the tremendous expansion of mining, commerce and industrial production into the rest of the continent by South African Breweries (SABMiller), MTN, Vodacom, Shoprite, the mining houses and others.

When unemployed youth in poor countries venture into the world to try and improve their lives and those of the people they leave behind, one place they

will seek out in the new country is the university. After obtaining their qualifications, many of these students will return home, but some will stay in the country or relocate to wherever they are offered a job. Why should anyone care where people live or work in a free society? Many of these international students return home more hostile to foreigners in their own countries than they were before studying abroad. British sociologist W. Outhwaite (1995) refers to a newspaper report that said participants in international exchange programmes often became more xenophobic as a result of their time abroad. In this paper I will draw upon my research into the issue of xenophobia in South Africa and try to make it relevant to the problem of higher education. So although this paper is not a study of the experience of foreign students as such, it tries to show some of the problems that various types of international experience generate using a few university students as a case study. Xenophobia is a much-debated topic in the new South Africa, and the universities will have to play a part in reducing the extent of the problem not just through appropriate research but also by providing examples of international cooperation and multicultural interaction.

International Students or “Migrant” Students?

Universities by definition are institutions rooted in a universal cultural experience, although, over time, they have developed individual and national characteristics and traditions which are preserved and marketed extensively. Ironically, in this age of globalisation, the liberal idea of higher education as a citizens' right or as a state-funded national project for producing well-informed and independent-minded citizens has given way to the increasing privatisation of education as a consumer item reserved for the wealthy. Despite the decline in state-funded education, the rising costs have not put off young people who desire to improve their lives by acquiring the necessary skills and training. In many classes at the University of Cape Town, a large number of semester-abroad students from Europe and America can be found. Certain postgraduate cohorts in the school of law, for example, have been known to comprise exclusively German students. The rationale for studying abroad is to broaden one's horizons and experience, but it is also for economic reasons, as it is cheaper to study in South Africa than in America.

For African students the poorly funded and poorly equipped universities in their own countries may be the reason why middle-class families may send their children to South Africa to study. These students do not just enrol in “world-class” institutions such as the University of Cape Town but in private colleges and universities that specialise in a limited range of popular course such as business administration or computer sciences. A typical example of

these private-sector higher-education institutions is the Gauteng-based Midrand Graduate Institute, a division of Educor, where by 2003 foreign students made up over 50 percent of the enrolment at its campus in Johannesburg. The great majority of these were from neighbouring SADC countries, with a small group originating from as far afield as Nigeria and Pakistan. Refugees from countries like Rwanda and Angola comprise another large group of foreign students. In response to this growth of foreign student enrolment, the Midrand Graduate Institute introduced an International Students' Office to facilitate the experience of foreign students at its campus (Macdonald and Kerry 2004). The University of Cape Town has a much larger and more diverse student population, but it is noticeable from the 2006 cohort of applicants that large numbers of students come from neighbouring countries within the SADC region, most notably from Zimbabwe (775), Botswana (259) and Namibia (166). Although there were only eight students from the USA in the 2006 cohort, a far larger number tend to come as semester-abroad and exchange students, thereby giving overseas students a larger presence than these statistics suggest.

Whatever local and global forces may be driving it, such internationalisation in higher education has some positive social implications. Although the children of the wealthy and powerful may dominate the student body in an unprecedented manner, it may also become more international as mobile elites criss-cross the globe looking for the best MBA, computer science programme or medical school. As for the negative consequences of internationalisation these tend to lie outside the education sector. The policies and practice of nationalistic Home Affairs bureaucracies and security officials, coupled with the xenophobia of host country populations, tend to oppose the free movement and settlement of people and the emergence of cosmopolitan citizenship. If South African universities become more elite as well as more cosmopolitan, this may make them less integrated into the societies in which they are located, since the xenophobic attitudes prevalent in society may be directed towards the wealthy foreign students. As the following case studies suggest, foreign students experience the same kind of hostility as refugees, asylum seekers and other migrants.

Case Study 1: Congolese Engineering Student

Michel Landu was a student at the engineering faculty at UCT. In his home country he represented the youth league of the Revolutionary Popular Movement (MPR). The MPR is the party of former president Mobutu. As a youth leader Michel had very strong ties to different political figures in Kinshasa. Among them was the ambassador of North Korea in Kinshasa. So when Laurent Kabila toppled the Mobutu government, many members of the MPR ran away

for fear of being arrested. When Michel was trying to convince members of his youth movement in Matete (Kinshasa) that it was important that they continue with their political work, some of the members went to report him to the new government. Michel was arrested and interrogated by the RPF soldiers from Rwanda who had helped Kabila's war against Mobutu. When he was released five weeks later, he continued with his political activities, making speeches and organising meetings.

Michel was arrested again on Christmas Eve 2000 after a meeting that was held at his house in Matete. The police told him that he was not allowed to hold political meetings in his house and said they had information that he was in touch with MPR people in exile who wanted to start a rebellion. Michel pleaded not guilty to the charges but was detained. The Ambassador to North Korea intervened, and Michel was once again released. Michel then left Kinshasa for Bas-Congo, the neighbouring province. When he arrived there he briefed some of his friends and colleagues about his situation. The next day the police said that they had received reports about Michel's political activities and warned him to stop or be arrested.

When Michel told them that the new government was more dictatorial than the Mobutu regime, the police arrested him and threatened to send him back to Kinshasa. Michel realised that this time he would not be able to survive, as he could no longer count on the protection of his mentors. He therefore bribed the police and escaped across the border into the Cabinda province of Angola. From there he went to Luanda and then flew to Windhoek in Namibia, where he was sent to a refugee camp in which, as he puts it, the situation was 'not good'. He was not allowed to continue his studies and could not work, because the camps were far from any town, and so decided to move to South Africa. When he arrived in Cape Town, Michel got help from a migrant from Ghana, who gave him a job and provided a place to stay. But Michel was not happy to stay in a "township" (Philippi) and decided to move to the (previously white) middle-class southern suburbs to look for a job. A few days before he moved from Philippi, his Ghanaian benefactor was killed and his businesses closed. Michel found a place in Maitland and met a coloured family who invited him to join them every Sunday for prayers. Michel joined their church (His People) in Rondebosch and made more friends. After about a year he moved to Observatory and registered as an engineering student at the University of Cape Town.

Michel said that he was a victim of racism and mentioned incidents that happened at his church and university to illustrate this. One day a woman from his church invited him out. He accepted the invitation and went out with her. The next day he received a call from his pastor telling him that he needed to

have a meeting with him, Michel said that he was busy and could not meet the pastor that day. The pastor angrily told him that, if he did not come for the meeting, the pastor would call the police. When Michel asked what was going on, the pastor said that he was aware that Michel went out with a lady from the church and attempted to rape her. Michel strongly denied the accusation and said he had never even kissed or touched the lady. The pastor replied that he believed what the lady had told him, and he gave Michel one day to come and see him or he would have him arrested. Michel told him that he would not go to see him unless the lady was also present, but the pastor refused. Michel said that he never went to see the pastor, and when he went to church the next Sunday, the pastor did not bring up the matter nor did the lady ever come to that church again. Michel's opinion was that it was all due to the fact that the lady was white. He did not rape the lady, and wondered how the pastor even came to know that he had gone out with that lady. Michel believed that the pastor probably saw them together and went out of his way to put an end to the friendship by concocting the false rape accusation.

Michel said that many others had complained about that pastor, but the church had refused to remove him. He said that a lot of people in the church were not tolerant, especially the coloured members of the congregation, and always undermined blacks. Michel said that even though Afrikaners are 'good', they sometimes insult the foreigners. He added that blacks sometimes accused them of being in South Africa to take their wives and their jobs. Michel explained that one day when he was in Langa (Cape Town's oldest black township), he met two men who asked him where was from and, when he told them that he was from Congo, they told him that he should go back to his country. He said that even the policemen were xenophobic and would always take the side of South Africans in any problem between South Africans and foreigners.

Michel claimed that even at university there were some professors who gave marks according to a student's skin colour. They routinely gave high marks to white students and low marks to the blacks. He cited his lecturer in Topology as an example, who he claimed deducted marks from blacks and made sure blacks failed his course, dropped out or changed their programme. Michel also spoke of a female student from Congo who had complained about the same professor. In Michel's view 'racism is not visible in South Africa but it is nevertheless everywhere'. He said that he was ready to return to his country as soon as the peace process in the Congo succeeds, as he would like to use his skills to help in the reconstruction of his country.

Michel's privileged position in the Mobutu regime made his escape from Kinshasa relatively easy, but his experience of racism and xenophobia in Cape

Town is typical. Although most of his fellow refugees remain in menial jobs and do not have the opportunity to continue with their education, his determination to return to his country is in part due to the hostility and racism he experienced in South Africa. The unfairness of neo-apartheid practices at the university, and the fact that even his fellow Christians apparently viewed him with suspicion, were constant reminders of his lack of rights. He confronted a hostile population in church, on the street, in his dealings with officials and even in the university. Considering that he did not leave his country voluntarily and that he had been relatively powerful and influential before the fall of the MPR regime in the Congo, it is understandable that he had little patience with this. Neither the wider society nor the university community was free of exclusionary neo-apartheid practices and beliefs.

Case Study 2: Itinerant Cameroonian Lawyer

One day in the summer of 2004 I returned to my office after giving a lecture and found a well-dressed young man waiting outside. He greeted me in Bemba with what I thought was a Congolese accent (he turned out to be Cameroonian) and informed me that he had brought me a letter from my friend Ferdinand Akuffo, who at that time was a professor at the University of Zambia. The letter consisted of just one sentence asking me to render any help I could to the young man. The young Cameroonian, Claude, had come to South Africa in search of higher education and carried with him laminated originals of his Yaoundé 1 university certificates.

He told me that he was an LLB graduate and had spent some time in Zambia trying to get admitted to the bar. He loved the Zambian people, had made many friends there and considered it his second home. His attempt to obtain a Law Practice Institute (LPI) qualification in Zambia was only hindered by his failure to raise money for the fees, as the LPI had accepted his application for admission. Claude then found work with AfroNet, a Human Rights NGO based in Zambia, hoping to work his way through college, but the Zambian immigration authorities had then refused to change his student visa into a work permit. Of course it is a common experience for a foreign worker to find employment only to have Home Affairs officials refuse the necessary permit. Yet, in the final analysis tax-paying workers, irrespective of their nationalities, are better than dependent refugees or illegal migrants who resort to bribing police officials or obtain forged documents in order to work. Governments, however, seem to be stuck in influx control mode.

So Claude left Zambia for South Africa, where he had friends, and on getting there he made enquiries at the University of the Western Cape, where one of the International Relations lecturers expressed a willingness to supervise

his research if it was on an African affairs theme. However Claude now had his mind set on entering Pretoria University's LLM programme in Human Rights, and his visit to my office was to ask me to write a letter of reference for him. I naturally advised him to ask one of his former lecturers at Yaoundé 1, since I did not know him and was not qualified to judge the quality of his work as a law student. He appeared not to understand what I said and impatiently asked me to just write the letter so that he could complete his application and mail it, adding that it did matter that I did not know him because 'this is Africa'.

I told him that it was precisely such bending of the rules that was to blame for the African crisis and that, as a lawyer, he should understand this better than I. In frustration he angrily told me that he was determined to obtain his LLM and that he would not let the matter of a letter of recommendation deter him. He told me that a former classmate of his had been in the last cohort of the Pretoria Human Rights course and was now at Harvard doing his PhD even though the classmate's academic record was not as good as his own. He said that, if he was admitted to Pretoria, he was certain to excel in his studies. In his mind I was behaving like the Home Affairs bureaucrats who had refused him a work permit, and in a way I was. Whereas I was sympathetic to his desire to work his way through college in Zambia, and even to give him what support I honestly could to get him into Pretoria University, I drew the line at writing recommendation letters for people I did not know. Why could he not just ask his former lecturers in Yaoundé to do this for him? That is a topic for another paper.

I gave him the email address of Professor Hansungule, a fellow Zambian who taught law at the University of Pretoria, and sent him on his way after convincing him that he had no choice but to ask his former lecturers in Cameroon to be his referees. He was not at all convinced by my argument. Evidently, in his mind, the best referees were people who could influence his selection whether they knew him well or not. Later on I wondered whether I had been too harsh with him. Quite a number of Cameroonians have come to South Africa with the aim of obtaining university degrees, and I know quite a few who have managed to get their qualifications and are either working in South Africa or studying at North American institutions. They pay for their studies by trading in Cameroonian fabrics and other goods that they import through family networks, or they find work in the informal sector. In order to do this, however, they enter and reside in South Africa not as students but as refugees. It should be acceptable to African and other governments that young people, if given the opportunity, can and should work their way through college. Why must legal migration be limited to a refugee status?

Claude visited my office a few more times to borrow books. A few months later he phoned to tell me he had found a job with a Cape Town-based human rights NGO and that he was calling me from his own office overlooking the Cape Town docks. He now understood and appreciated my advice not to take shortcuts for convenience and was optimistic about his future. That was the last time I heard from him.

Unlike Michel, Claude was not a refugee but a migrant student. He is that category of migrant that leaves home specifically in search of knowledge. His story is not unique; there are many determined and hardworking young people who are willing and able to invest a lot of energy in improving their qualifications, and it just does not make sense to frustrate them with influx controls, since they are able to contribute to the improvement of other people's lives as well as their own. Were he European or from a different day and age, Claude's efforts would have been applauded instead of being challenged and criminalised by state officials.

An older example of the determined migrant student is Malawian Legson Kayira. When I was at school in Zambia, we read Kayira's autobiographical 'I Will Try' (which was also the motto of his mission school), in which he describes how he walked from Malawi to Sudan, a distance of over three thousand kilometres, seeking opportunities for further education. Eventually, according to Killam and Rowe (2003), he was admitted to an American college and later studied at Cambridge. However, for every successful Legson Kayira, there are probably many who fail, but those who make it tend to be successful at what they do because of their determination. The barriers put in their way by officials make their work that much harder. In South Africa the current government has relatively liberal regulations pertaining to refugees and asylum seekers who enter the country easily. However South Africans have acquired a reputation for not being welcoming to foreigners. The police appear stuck in the influx-control mentality of the colonial and apartheid eras and assume that every foreigner is a potential criminal. Since South Africa does not have refugee camps and prefers that refugees and asylum seekers mingle with the South African population, the hostility that the host population has towards foreigners sometimes degenerates into violence.

Internationalisation of Education in South Africa

According to South Africa's National Commission on Higher Education (1996):

of crucial importance for higher education is the rapid international development of the "learning society". The term refers to the proliferation of knowledge and information in the contemporary world. The production, dissemination, acquisition and application of knowledge are shaping the structures and

dynamics of daily life to an unprecedented degree. The learning society places a premium upon lifelong and continuing education: growing arrays of public and private organisations (“non-specialised learning organisations”) share in knowledge production with institutions of higher education. The challenge to higher education is to adapt to these changes and to sustain its role as a specialised producer of knowledge. If knowledge is the electricity of the new globalisation, higher education institutions must seize the opportunity of becoming major generators of the power source.

However, for Africans who have immigrated to South Africa since the end of apartheid, xenophobia has been a source of anxiety and disappointment. The pan-African solidarity that Africans across the continent gave to South African freedom fighters has been repaid with hostility. Many victims of South African xenophobia could not say why South Africans found it difficult to reciprocate. However the unchanged nature of the South African economy after 1994 made it very difficult for black South Africans to play host to thousands of immigrants and refugees in the same way that other countries did. And even though it has been shown in numerous Southern African Migration Project (SAMP) surveys that immigrants create work and contribute to the South African economy, the news media continue to perpetuate the view of the foreign African as a parasite and criminal.

As Nyamnjoh (2006: 69) has shown, although Africans have always been mobile, a dominant yet shortsighted tendency portrays migration as necessarily productive of ruptures and anomalies. Indeed if you accept the “out of Africa” origin theory, then migration was started in Africa, with all the history-making consequences this implies. Of colonialism’s many injustices, denying Africans the right to move freely has been the most devastating. The point is that mobility as a survival strategy did not start with globalisation. For Africans globalisation, like colonialism, immobilises and impoverishes. The presence of African workers in Europe, we may argue, occurs in spite of, rather than because of, any natural trend in global capitalism to recruit labour where it may be most profitable.

Although the derogatory label “makwerekwere” (babblers), which South Africans use to label African migrants, implies linguistic or cultural reasons for fear or hatred of foreigners, it is obvious that the economic marginalisation of black South Africans, rather than cultural differences, is a major factor driving xenophobia in South Africa. Both positive and negative stereotypes of foreigners are based on economic rationalisations. Immigrants who create wealth and provide jobs are welcome; those who take away jobs are not. Thus some nationalities are less welcome than others, depending on whether they are perceived as job creators or job takers. According to Statistics South Africa (2003

viii) most documented immigrants fall in the productive twenties to forties age group. Some of these are university or college students, and most are seeking employment. A positive view of immigrants would point to their skills and productive capacity, but a negative view would blame them for creating new pressures on South Africa's scarce higher-education and employment facilities. Migration being what it is, however, there are even larger numbers of South African émigrés of similar age who have been recorded in other countries. The difference is that South African professionals are deliberately enticed to relocate to Australia, New Zealand, Canada or the USA and thus welcomed as a skills gain rather than a social problem in their new countries.

The threat of permanent unemployment occupies such a central position in the minds of South Africa's essentially unskilled and landless black proletariat that it is understandable why foreigners are perceived as the people who take away jobs and threaten livelihoods. Although government grants exist for child support, pension and disability, wage employment is the only means by which black South Africans can break out of poverty. Other than the right to vote, everything that black South Africans hoped for in post-apartheid South Africa requires money. The peasant farming that enables poor people in other parts of the world to function within the colonial capitalist economy is not a viable option here.

There is a Zambian saying in the Bemba language – 'Umwana ashenda atasha ba nyina ukunaya' – which translates as 'The child who never leaves home is forever praising his mother's cooking'. Children who think their mother is the best cook in the world may well be right, but the fact that they have never left home makes their judgement more than biased because it is based on ignorance. If ignorance is one factor that drives xenophobia, we do not expect university students to be xenophobic, because they are supposed to be well informed, cosmopolitan and open-minded. However, as Outhwaite has suggested, using his concept of "reflexive" xenophobia, even cosmopolitans can be xenophobic. Indeed we have seen how East Europeans, for example, upon arriving in South Africa, sometimes assume the most right-wing of colonial prejudices. Such "cosmopolitans" are actually xenophiles, but they identify with their foreign love so closely that they end up assuming its xenophobic culture. Thus the architect of South African apartheid Hendrik Verwoerd, who was Dutch, and Janusz Walus, the Polish killer of South African Communist Party leader Chris Hani, can be seen as xenophiles who loved the Afrikaner so much they ended up adopting Afrikaner xenophobia.

Today xenophobia debates in South Africa are dominated by the human rights violations meted out to foreign Africans by South Africans, Batswana and, to a lesser extent, other SADC Home Affairs, Police and state officials as

well as citizens generally. Although official statistics do not show that there has been a 'flood of foreigners' into South Africa, the newspapers continue to churn out grossly exaggerated guesstimates quoting alarmist academics, independent researchers, security think tanks and political leaders. Consequently the belief that millions of "illegal aliens" are present in the country is widely held. Foreign Africans in particular are blamed for contributing to the spread of squatter settlements, violent crime and horrible diseases. Although this myth has been disproved by a number of researchers, notably those involved in the Southern African Migration Project at IDASA (MacDonald et al 1998), it refuses to die out.

It is widely believed in wealthy countries that the world's poor are all determined to make their way to Europe, the USA or South Africa, but most people do not wish to leave their home countries. For example, despite the opportunity given to them to become permanent South African residents, thousands of Basotho and Mozambican migrant workers opted not to accept the offer. With the exception of Zimbabwean professionals, for most SADC citizens South Africa is not the preferred country of residence or work, in part because South African cities have always been regarded as anomic and violent. Johannesburg, as the place of gold, is where workers have to go to earn money, not where families want to raise their children or where old people can retire peacefully. It is not surprising, therefore, that the departure of skilled white (and now black) South African professionals has not been matched by immigration of skilled people, as the net loss of people shown in Table 1 below indicates.

Table 1: South Africa Migration: main destinations

Year	Documented Migrants	Self-declared Emigrants	Net gain/loss
1994	6,398	10,235	-3,837
1995	5,064	8,725	-3,661
1996	5,407	9,708	-4,301
1997	4,103	8,946	-4,843
1998	4,371	9,031	-4,660
1999	3,669	8,487	-4,818
2000	3,053	10,262	-7,209
2001	4,832	12,260	-7,428
2002	6,545	10,890	-4,345
2003	10,578	16,165	-5,587

Source: Stats SA Report No 03-51-03-(2003)

Europe is the preferred destination for most South African emigrants, and most but not all of these are of European origin themselves. Europeans also favour South Africa as a place of retirement or resettlement where Euros and Pounds have a higher buying power.

Table 2: Selected Occupation of Documented Immigrants

Occupation	Immigrants		
	2001	2002	2003
House keeping	137	131	7,277
Child not scholar	204	236	315
Scholar - student	901	1,182	1,427
Engineers	62	34	61
Professional	524	576	499
Natural Sciences	59	59	51
Medical	41	88	73
Educational	179	189	90
Managerial	258	382	416

Source: Stats SA Report No 03-51-03-(2003).

Whereas the departure of South Africans to Europe and elsewhere is seen as a loss of skills and capital, and as a brain drain, the African arrivals are usually seen as a problem. Only recently has there been an attempt to adjust immigration laws specifically with a view to appear less hostile to foreign workers, investors and professionals. It is likely that professionals from Africa will join the flight to the north, because the aggressive recruiting of Britain and New Zealand for medical staff is likely to attract them as well. After all wages and working conditions are better all round in the wealthier countries.

This view of South Africa as transit point does not just apply to professionals, but it is true for young unskilled migrants as well. South Africa provides opportunities for getting skills, money and contacts and, for many, a chance to improve their English before embarking on the trip to America or the UK.

College Exclusions under Neo-Apartheid

University training has always been expensive, a privilege enjoyed by economic and social elites. Since the 1990s, however, a combination of factors has made affordability the main factor in determining who may have access to institutions of higher learning. Whether new lecturers are hired on permanent

or short-term contracts depends on funding. This has meant that when South Africa should have been increasing the number of black students and researchers in order to correct the social imbalances caused by centuries of colonial oppression and apartheid, the number of black graduates has not increased significantly and tends to be concentrated in the humanities and social sciences. The need to change the naturalised institutional cultures of the white universities has been highlighted by black South African students and faculty members who have a long history of exclusion and who find working in the new environment of a predominantly or historically white institution to be alienating. Despite this problem increasing numbers of students, usually the children of the elite from countries such as Tanzania, Kenya and Nigeria, suggest that, whether they reform or not, the white universities will continue to enrol increasing numbers of black students. Zimbabweans have a longer tradition of studying in South Africa, and Oucho (2006: 59) has shown that Zimbabwean professionals are also more likely to seek work in South Africa than graduates from any other SADC country.

Table 3: Nationality of students applying for admission to UCT in 2006

South Africa	9,089	Uganda	28
Zimbabwe	775	PRC	27
Botswana	259	Nigeria	10
Namibia	166	Korea	18
Mauritius	99	Angola	15
Tanzania	98	Cameroon	14
Kenya	79	Ghana	10
Lesotho	67	Germany	9
Zambia	66	USA	8
Malawi	32	Chinese Taipei	7
Mozambique	31	Ethiopia	6
Great Britain	29	Norway	6

Source: Adapted from UCT Admissions 2006.

Cape Town born and bred students might find it more difficult to fit into UCT life than Zimbabwean or Kenyan students. In a study of black women academics at UCT Meny-Gibert found that Nomsa, ex-Fort Hare, and Asthenia, ex-University of Zimbabwe, both felt that they were well prepared for their studies at UCT. Faye, ex-University of the Western Cape, on the other hand, was less certain:

I felt very at home at UWC, I don't feel at home at UCT. You know, I must think about that. It's not really because the people are – it's not because of the environment. It's because of the perception ... what you are used to ... my past ... It's very different for my peers who are younger. They would have gone immediately into – I don't know, I just get the feeling that it's different.

The perception that UCT is 'not for us' may be due to long-standing local social problems, about which foreign students know nothing. The Legson Kayira type of migrant student or the wealthier semester-abroad international student does not know what kind of political baggage UCT carries and will happily go about their business, oblivious to the discomfort of others around them. Congolese student David Fuamba, who acted as my research assistant, confessed after a few days of interviewing fellow Congolese about xenophobia that he was seeing things from an entirely new perspective. Before that his life on campus revolved around his studies and his circle of international students. He had not experienced the hostility that his fellow Congolese spoke to him about. However, one night, when he had been with his group of white fellow-students and friends, one of them had wanted to leave early and asked for some money from David so he could take a cab. As David was giving his friend money, the bar man saw this and, assuming that a drug dealer was in the house, angrily told David to get out and never show his face there again. David maintained, previously he would have written this incident off as a misunderstanding, but since conducting interviews for me, he has become aware of the prejudices and discrimination that had previously not bothered him.

Ironically, until recently, historically white South African universities did not officially attach much importance to the nationality of students, preferring instead to keep account of the racial breakdown of the student body. By representing the children of the African elites in other countries as previously disadvantaged on account of their race, they are actually postponing the implementation of proper student and staff development programmes that would redress the apartheid legacy. In this regard some of the recipients of the Wenner-Gren fellowship which ran in the University of Cape Town's social anthropology department until 2005 are from very privileged backgrounds in their home countries. Although the intention of the fellowship was to encourage more black anthropologists, irrespective of their class background, by the time it was wound up, it had created much resentment among some of the white lecturers and students due to the fact that needy white students were not allowed access to the fund. Needless to say, those who felt excluded blamed those who were favoured and claimed that affirmative action is reverse discrimination, a view given credence when black elites receive scholarships instead of the chil-

dren of the black poor. It has to be mentioned, however, that most recipients of the fellowship were honours-level students (considered a postgraduate qualification in South Africa) and not MA or PhD.

The number of black South African postgraduates is still too low to solve the social problems that emanate from previous exclusions, and the African migrant student or professionals cannot solve these uniquely South African problems. A more concerted effort needs to be undertaken to promote the training of black South Africans in local and international institutions. The aim of such investments would not only be to recreate the black intelligentsia that was almost destroyed by apartheid but also to reduce the sense of resentment that may result from the perceived domination by foreigners of positions of influence in the academy.

Conclusion

Access to good university education can contribute to the eradication of global apartheid and the bridging of national, regional and international income gaps. It may even reduce racial and ethnic tensions at both individual and collective levels. Universities also provide a unique opportunity for future leaders to forge links and create social networks that cut across race, class, gender and national differences. In the past Fourah Bay College, Makerere, Fort Hare and the University of Dar es salaam have all shown how one institution can promote ideas and create networks of alumni that can have positive impacts on history in several countries. Since they have an obvious leadership role to play in their communities, university graduates can also function as positive role models symbolising genuine international cooperation by drawing on their campus friendships. The experience in colleges and universities in Europe and America also shows how influential alumni can use their international networks of fellow business and political leaders for the good of both the alma mater and their various countries.

If this paper could conclude with just one policy recommendation, it would be that the South African government should take the lead in SADC and the African Union in promoting the rights of citizens to enjoy free movement across the continent and make a contribution where they can without being criminalised by xenophobia or bureaucracy. Most people are law-abiding and productive and should be treated as such in whatever country they choose to study, trade or reside in. As far as the universities are concerned, their long history of internationalism and multiculturalism makes them automatic candidates for facilitating cooperative research and teaching and other exchanges that are essential for making globalisation in other aspects of life feasible.

As the case study of refugee and migrant students in Cape Town has demonstrated, there are many formidable barriers to the smooth development of a SADC migration strategy, and even more difficult policy issues have to be addressed if international migration across the African continent and globally can ever be normalised. The SADC Draft Protocol on Free Movement of 1995 was scuppered by South African opposition based on the well-known national paranoia that prevents the country from fully integrating in African life and makes a mockery of its pan-African agenda of a African Renaissance. Cross-border migration for students, migrant workers and traders thus continues to be influenced by police and surveillance strategies rather than the development of an African Union. Universities and other institutions of higher education can play a role in reversing this unfortunate attribute of South African culture. It is hoped that this paper can stimulate more research, debate and creative policy-making to challenge the counterproductive xenophobia and promote a pan-Africanism that will unleash the full potential of African youth.

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Les collaborations université-industrie en Afrique*

Mambo Tabu Masinda**

Résumé

Cet article traite des collaborations université-industrie comme stratégie de modernisation industrielle en Afrique. En présentant les avantages liés aux collaborations université-industrie, l'objectif est de mettre en relief l'amplitude de l'apprentissage collectif par le partage des ressources et la circulation des connaissances. Je ne prétends pas fournir des solutions miracles à l'échec industriel en Afrique mais susciter un débat sur des questions comme celle-ci : quelles sont les limites et les forces des universités africaines dans d'éventuelles collaborations avec des entreprises nationales et multinationales? La discussion met en relief les cultures du monde industriel et universitaire avant de se pencher sur l'expérience des collaborations université-industrie des pays aux différents niveaux de développement dans les sciences et technologies en Afrique pour ensuite suggérer des pistes d'actions adaptées aux réalités des entreprises et des universités d'Afrique.

Abstract

This article explores university–industry linkages as a strategy for industrialization in Africa. It presents the advantages of cooperation between university and industry to highlight the importance of collective learning through the sharing of knowledge and resources. The author primarily aims to elicit debate on the strengths and limitations of African universities in collaborating with national and multinational corporations. The article first describes the cultures of both the university and industry, analyses different experience of university–industry collaboration in countries of

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** Département de science politique, Université Catholique du Graben, Butembo, République Démocratique du Congo. Email: mmasinda@mosaicbc.com

varying levels of science and technology development and lastly suggests action framework adapted to the realities of industries and universities in Africa.

Introduction

Un consensus semble s'être installé dans les milieux gouvernementaux, industriels et des organismes internationaux comme l'UNESCO et la Banque mondiale à l'effet que les universités doivent se rapprocher davantage des industries. Ceci explique l'existence d'une littérature abondante sur les collaborations université-industrie à la fois dans les pays développés et ceux nouvellement industrialisés (Mowery 1999); la croissance fulgurante du nombre des partenariats université-industrie dans les pays industrialisés et l'évolution des politiques gouvernementales qui cherchent de plus en plus à créer un cadre législatif propice à cette nouvelle dynamique (Graham and Diamond 1997).

Malencontreusement, à l'exception de quelques déclarations d'intentions formulées au cours de grandes conférences sur la science et la technologie, la littérature sur les collaborations université-industrie est presque inexistante en Afrique. Qu'est-ce qui pourrait expliquer cette situation? Il y a plusieurs explications possibles. La première pourrait être les capacités peu développées des infrastructures de la R&D et la prépondérance des technologies traditionnelles dans l'économie africaine. En effet, dans les pays industrialisés, les collaborations université-industrie se font plus souvent entre les grandes entreprises et les universités spécialisées dans des domaines de haute technologie comme l'ingénierie, la biotechnologie, l'informatique, la pharmacie, etc. Une deuxième explication pourrait être le manque de demande de science et technologie par les entreprises locales. Il faut reconnaître que les économies africaines sont largement dominées par des entreprises publiques peu compétitives (Banque mondiale 1989) et un large secteur d'activités économiques informelles dont la demande des sciences et technologies est quasi inexistante.

Le but de cet article est de susciter dans le milieu politique, des chercheurs sur le développement de la science et technologie en Afrique et des organismes internationaux un débat sur l'importance des collaborations université-industrie comme stratégie de modernisation industrielle en ASS. L'objectif est de mettre en évidence l'amplitude de l'apprentissage collectif par le partage et la circulation des ressources (Masinda 1997). Nous ne prétendons pas fournir des solutions miracles à l'échec industriel en ASS mais au contraire susciter un débat sur les limites et les forces des universités africaines dans d'éventuelles collaborations avec des entreprises nationales et multinationales. La discussion portera d'abord sur les cultures des mondes universitaire et industriel avant de broser une vue générale sur la littérature des collaborations université-industrie des pays aux différents niveaux de développement. Je terminerai

en suggérant des pistes d'actions adaptées aux réalités des entreprises et des universités d'ASS.

Les Mondes Universitaire et Industriel: Deux Mondes aux Cultures Opposées

Cette section présente brièvement les résistances culturelles de ces deux mondes, décrit brièvement les implications des collaborations université-industrie, en termes de bénéfices et conflits potentiels et aussi les défis qu'elles exigent aux institutions d'enseignement supérieur.

Dans une excellente plaidoirie en faveur du décloisonnement des mondes universitaire et industriel en matière de production et d'utilisation de la science et technologie, Gibbons et al. (1994) élaborent abondamment sur les fondements historiques et culturels qui expliqueraient l'isolement de ces deux entités. Ces auteurs considèrent que les valeurs de ces deux mondes ont longtemps été contradictoires, constituant ainsi la barrière principale à leur collaboration. Cette réalité est en train de changer, croient-ils.

Dans ce qu'ils décrivent comme étant le model 1 de la production de la connaissance, les problèmes sont organisés et résolus dans un contexte largement dominé par les intérêts de la communauté académique. Ceci implique que le monde universitaire baigne dans une culture fondée sur l'exclusivité de la découverte scientifique s'inscrivant dans une perspective de longue durée, une mission philanthropique dans laquelle les découvertes scientifiques constituent un don à l'humanité et dont le principal client est l'étudiant. Le monde industriel quant à lui se considère comme étant le dépositaire de la transformation de la science en technologies qui répondent aux besoins du marché dans une perspective à court terme, avec l'objectif de tirer des profits substantiels des investissements alloués au développement des technologies.

Toujours selon eux, le model 2 est entrain de s'installer en remplacement du premier. Le model 2 de production de la connaissance diffère du premier par une profonde remise en question des valeurs qui sous-tendent le premier. Dans le model 2, la production de la connaissance se fait dans un contexte de résolution des problèmes ou d'application de la science et des technologies. L'idée est de résoudre des problèmes, d'opérer sur les facteurs de l'offre et la demande des technologies. Ils mettent aussi en évidence deux éléments importants: le principe de responsabilité sociale et du contrôle de la qualité. Le principe de responsabilité social fait référence à la détermination du public à être impliqué davantage dans l'interprétation des résultats de la recherche, à la définition des problèmes et la formulation des priorités auxquels les universités doivent s'attaquer. Plus large encore est le principe du contrôle de la qualité

dans la mesure où elle réfère à l'intérêt du public à vouloir participer aux critères d'efficacité des universités (Mourad 1997 ; Powell et Owen-Smith 1998).

La plus importante implication de ce changement de culture est sans nul doute la fin du monopole des universités comme productrices de la connaissance d'une part et la fin du monopole des entreprises comme génératrices des technologies, suggérant du même coup plus de collaborations entre ces deux mondes. Une autre conséquence du mode 2 de la production des connaissances est la centralité des moyens de communications qui doivent permettre un échange rapide de l'information tant sur le plan informel que formel. Les technologies de l'information sont ici au cœur de ce défi à relever.

Facteurs de changement des cultures

Le monde universitaire subit de nos jours des critiques du public les accusant de ne pas répondre adéquatement aux besoins de la société. Les entreprises quant à elles ne sont plus en mesure de générer seules toutes les ressources dont elles ont besoin pour survivre sur le marché de plus en plus compétitif. Ceci étant dit, il faut avoir à l'esprit que les pratiques de collaboration s'expliquent par une combinaison de facteurs dont il ne suffira qu'à nommer quelques uns. Un premier facteur serait l'incapacité des universités à transformer la recherche de base en produit commercialisable (Powell et Owen-Smith 1998 ; Wildman 1998). Pour ce qui est de l'ASS, plusieurs chercheurs accusent les gouvernements de mettre davantage l'accent sur l'offre de la science et technologie aux dépens de sa demande (Davis, Tiffin et Osotimehen 1994 ; Oyelaran-Oyeyinka 1997 et Zaky & El Faham 1998). Par exemple, Paul Vitta (1993) épingle le peu d'efforts gouvernementaux orientés vers la commercialisation des résultats de la R&D et dénonce le manque flagrant de capital de risque pouvant permettre aux industriels d'exploiter les résultats de la recherche et des nouvelles technologies. Pour permettre aux entreprises de tirer le meilleur profit de tout ce que peuvent offrir les universités Davis, Tiffin et Osotimehen (1994) proposent la création des centres d'innovation destinés à fournir des services techniques, managériaux, administratifs et financiers, des coopératives industrielles destinées à la veille technologique et l'apprentissage collectif par la mise en commun des ressources des entreprises.

Un deuxième facteur serait l'incapacité des entreprises à générer seule la technologie dont elles ont besoin pour rester concurrentielle, les obligeant du même coup à coopérer avec d'autres entreprises et à se rapprocher des universités et des institutions de R&D. En effet, la nature et le rythme très rapide des changements technologiques ne peuvent être soutenus par une seule entreprise. Ce nouvel environnement crée une volonté collective de chercher des mécanismes plus efficaces de production des connaissances (Sjolund 1998).

Pour survivre, les entreprises ont de plus en plus recours aux alliances externes. Cette piste d'action est particulièrement critique pour les entreprises d'ASS qui ont pour la plupart des ressources très limitées. Le partage et la mise en commun des ressources pourraient permettre de surmonter leurs limites structurelles.

Les préalables à la collaboration

Les préalables aux collaborations université-industrie présentées ici sont celles qui prévalent dans les pays occidentaux. À la lumière des éléments présentés dans ci-dessous, on pourrait se demander si les universités africaines peuvent devenir des partenaires efficaces des entreprises? L'écart énorme dans le développement technologique entre les pays d'ASS et les pays industrialisés pourrait-il constituer une barrière au partenariat entre les universités d'ASS et les entreprises étrangères qui pourtant disposent des ressources plus étendues et plus appropriées pour sortir le continent de sa crise industrielle?

Voici les critères fréquemment évoqués pour qu'une collaboration université-industrie soit efficace (Tornquist et Kallsen 1994):

- il faut que l'université dispose de ressources suffisantes et par conséquent qu'elle soit d'une grande taille pour soutenir le partenariat ;
- elle doit jouir d'un grand prestige en matière de recherche et développement ;
- elle devrait avoir un nombre assez élevé d'étudiants au niveau doctoral ;
- elle doit être proche des entreprises.

Si l'on considère ces critères applicables aux pays occidentaux, peu ou aucune université africaine ne peut être retenue comme partenaire avec une entreprise. Et pourtant, nous ne pouvons pas oublier que certaines universités africaines font des collaborations avec des industries dans certains domaines académiques tel la biotechnologie et les maladies infectieuses même si elles ne répondent pas à tous ces critères.

Types de partenariats et bénéfices des collaborations université-industrie

Il existe une littérature abondante sur les formes que peuvent adopter les partenaires dans le processus d'innovation (Shapira 1998; Dill 1995 et Bloedon et Stoles 1994). L'entreprise peut collaborer avec l'université dans les domaines suivants:

- conduire une recherche conjointe avec l'université: ceci consiste à une mise en commun des ressources par une université et une entreprise. La recherche conjointe réduit le fardeau de la R&D des entreprises et per-

met d'assurer une vielle sur les nouveaux développements en sciences et technologies ;

- offrir des séjours académiques en industrie: il est de plus en plus courant de voir les membres du corps académique passer un ou deux ans de congé sabbatique en entreprise pour y conduire de la recherche et se familiariser avec les besoins de l'industrie ;
- prêter de l'équipement à l'université pour effectuer de la recherche ;
- offrir des dons d'équipements pour soutenir le travail du personnel académique ;
- financer des chairs en matière de gestion de la technologie, recherche industrielle etc. ce qui permet aux universités de compenser une partie des pertes financières dues aux coupures budgétaires des gouvernements.

L'université quant à elle peut apporter au monde industriel:

- l'offre des services de consultants: la consultance peut adopter plusieurs formes allant de l'assistance aux professeurs d'obtenir des patents, vendre les licences et la commercialisation des résultats de la recherche ;
- l'expertise d'un bureau de liaison industrielle chargé d'identifier les clients potentiels des résultats de la recherche et les partenaires prêts à s'intégrer dans les potentiels collaborations ;
- la création d'entreprises par des scientifiques ;
- l'animation des centres d'innovation qui peuvent offrir des services de management, financiers et techniques.

Les conflits potentiels

Les intérêts contradictoires entre l'université et l'entreprise génèrent parfois des conflits qui peuvent être regroupés sous trois catégories : les conflits d'intérêts, de gestion et d'éthique. La rubrique conflits d'intérêts englobe tous les types de conflits touchant l'aspect financier ou économique qui proviennent de l'usage des fonds, l'influence inappropriée et la propriété des licences et patentes (Campbell 1997: 359-61). Une deuxième catégorie de conflits est reliée à la gestion: tous les conflits de gestion tombent sous le parapluie de l'allocation du temps et de l'énergie que les professeurs consacrent à l'enseignement, la recherche et le service au public. Certains chercheurs ont déjà souligné le fait que le partenariat entre l'université et l'industrie exige beaucoup de temps et d'énergie. Il y a donc là un risque évident de voir les professeurs se consacrer plus à leurs intérêts personnels aux détriments de l'enseignement et le service au public.

Une autre inquiétude est d'ordre moral

En effet, le partenariat université-industrie comporte le risque de voir les professeurs exploiter leurs étudiants en les utilisant comme des serviteurs de recherche pour compléter la recherche des professeurs. On retrouve aussi sous cette rubrique les conflits reliés à la distribution inéquitable des ressources entre les différents départements au sein de l'université. En effet, l'allocation interne du budget tend à favoriser les départements qui réussissent à s'aligner sur les critères du marché. Cette situation est frustrante dans la mesure où elle crée des inégalités salariales entre les sciences exactes et les sciences sociales et les arts.

Les défis à relever

En plus de s'assurer qu'elles répondent aux critères mentionnés ci-haut, les universités impliquées dans les collaborations avec des entreprises créent à des coûts très élevés des équipes internes chargées d'assister les professeurs dans l'élaboration des propositions de contrat de partenariat avec les entreprises, la négociation des termes des fonds, la gestion des patents, la résolution des conflits (Baldwin 1998: 908). Même si certaines universités préfèrent créer des unités autonomes qui jouent le même rôle que les unités établies à l'intérieur de l'université (Sjolund 1998: 112), cette stratégie reste aussi coûteuse que la première. Alors que tous s'entendent que les universités africaines manquent de ressources, comment peut-on imaginer financer des collaborations si coûteuses avec des entreprises ?

**État des Collaborations Université-Industrie dans les Pays
Nouvellement Industrialisés et en Afrique*****Expériences des pays nouvellement développés***

La majorité des études portant sur les collaborations université-industrie sont conduites dans les pays industrialisés. Depuis un certain nombre d'années, elles se sont étendues sur les pays nouvellement industrialisés. Par exemple, en décrivant les collaborations technologiques entre les universités et les industries au Singapour, les résultats de la recherche montrent que les entreprises multinationales collaborent peu avec les universités locales contrairement à ce qui se passe par exemple dans d'autres pays de la région (Wong 1999). Une excellente étude conduite par Al-Sultan (1998) a mis au jour les barrières socio-politiques, économiques et culturelles qui bloquent le développement des parcs scientifiques au Kuweït.

Au Mexique, plusieurs expériences de promotion des parcs scientifiques sont en cours dans le secteur de la biotechnologie. Les résultats des études conduites sur ces expériences ont montré qu'il existe une méfiance réciproque

entre les mondes universitaire et industriel (Castanos-Lomnitz, 1995; Casa et Luna 1997). Au Brésil, Cabral et Dahab (1998) ont analysé le développement du parc scientifique BIORIO spécialisé dans la biotechnologie. Les résultats de leur recherche ont montré que le pays ne remplit pas encore un certain nombre de critères nécessaires au développement d'un parc scientifique notamment la disponibilité d'experts capables de concilier les tensions culturelles entre les mondes universitaires et industriels. En Croatie, une étude a montré que les collaborations université-industrie sont encore faibles et qu'il existe des sérieux obstacles reliés au peu d'intérêt et d'investissement du monde industriel dans la R&D alors que le système de R&D manque cruellement d'expertise pour répondre aux besoins des entreprises (Svarc, Grubisic et Sokol 1996).

Des récentes études tant comparatives que des études de cas, portant sur les pays aux revenus moyens par tête d'habitants mais dont les contextes socio-politiques et les niveaux de développement des capacités de R&D sont différents, aboutissent à des résultats qui justifient des approches variées adaptées aux contextes socio-économiques des pays. Par exemple, Blazs et Plonski (1998) ont comparé les collaborations université-industrie dans les pays aux revenus moyens des pays d'Amérique Latine et ceux de l'Europe de l'Est. La discussion montre que les pays de l'Europe de l'Est ont des systèmes de R&D très développés mais peu connectés au secteur industriel à cause des pesanteurs culturelles et politiques malgré les mesures de libéralisation engagées depuis la fin du communisme. En Amérique Latine, le défi est de toute autre nature. Les systèmes de R&D dans ces pays ont encore à un niveau de compétences et d'infrastructures technologiques très peu développées. Pour les pays de l'Europe de l'Est le défi est de stimuler la demande des sciences et technologies alors qu'en Amérique Latine c'est le développement des ressources humaines qui constitue la priorité.

Qu'en est-il en Afrique subsaharienne?

On ne peut amorcer le débat sur les relations université-industrie sans avoir une idée du niveau de la science et technologie dès lors que les politiques scientifiques et technologiques doivent être adaptées aux exigences contextuelles selon qu'une économie est agraire ou fondée sur une production de haute technologie (DaSilva 1998 ; Gaillard et Waast 1998 et Amonoo-Neizer 1998). Pour illustrer nos propos référons-nous à quelques indicateurs de la science tel que la production scientifique, la circulation des connaissances et le niveau des dépenses allouées à la R&D.

L'enrôlement des étudiants dans l'enseignement supérieur, le nombre des chercheurs et des institutions de recherche sont encore limités en ASS. Par

exemple, le Congo-Kinshasa qui a une population de plus de 50 millions d'habitants n'a qu'un effectif de 52,8 mille étudiants enrôlés dans les institutions d'enseignement supérieur et dispose seulement de 1183 chercheurs dans 9 centres de recherches. Deux pays moyens, notamment le Cameroun et le Kenya ont des effectifs relativement appréciables (African Development Bank 1994). La République Sud Africaine est le seul pays qui investit suffisamment de fonds dans la R&D avec des dépenses de 1% du PNB alors que le Burundi n'investit que 0,3% de son PNB et la République centrafricaine 0,2% (UNESCO 1998).

En évaluant le niveau d'intégration de la science des pays d'ASS dans le système mondial, il s'avère par exemple qu'en 1992 la co-publication restait très limitée. Par exemple, en 1992 les chercheurs ivoiriens n'ont réussi qu'à co-publier 908 articles parmi lesquels 145 ivoiriens étaient les premiers auteurs. Le Nigéria s'en sort mieux avec 5.310 articles dont 1.823 chercheurs comme premiers auteurs au cours de la même période sont des Nigériens (Braun 1992). Dès lors que l'accès et la circulation des connaissances constituent des éléments importants dans le système d'apprentissage l'ASS accuse à ce niveau un retard considérable et les choses ne semblent pas s'améliorer. Par exemple, en 1995, au Burkina Faso, seulement 28 personnes sur 1.000 habitants possédaient une radio et 6 personnes seulement sur 1.000 possédaient un téléphone (UNDP 1998).

Lorsqu'on considère le nombre d'étudiants enrôlés dans les disciplines scientifiques, les mathématiques et les sciences des ordinateurs et génie, là encore l'ASS accusent un retard considérable comparativement à ce qui se fait en Europe et d'autres pays du tiers monde. Par exemple, l'Île Maurice n'a eu qu'un enrôlement de 0,1% en sciences naturelles, 0,1% en mathématique et sciences des ordinateurs et 0,3 dans celles du génie au cours de la période 1990-95. Quelques pays s'en sortent assez bien, par exemple le Cameroun dont l'enrôlement en sciences naturelles est de 0,8%, un taux qui se rapproche de celui de la Belgique (1,2%) et comparable à ceux de la Bulgarie (0,9%) et du Liban (1,3%). Cependant, l'écart est très prononcé lorsqu'on considère le nombre d'étudiants en génie parce que la Bulgarie avait au cours de cette période 1990-1995, 8,4% d'étudiants en génie et la Roumanie 4,5% alors que le Madagascar n'a qu'un taux d'enrôlement de 0,1% et le Cameroun 0,1% au cours de la même période (Banque mondiale 1998).

Un début timide mais prometteur

En ASS, certaines universités sont engagées dans des collaborations avec le monde industriel même si les ressources allouées à la commercialisation des résultats de la recherche restent encore très limitées et concentrées dans des

domaines qui ne sont pas de haute technologie (DaSilva 1998). Selon Gbewonyo (1997), l'ASS vit actuellement un contexte dans lequel le développement de la biotechnologie est possible. Il insiste sur l'émergence de nouveaux scientifiques en biosciences et biologie moléculaire grâce aux projets Réseau Africain en Biosciences et le Réseau Africain des Centres de Ressources Microbiennes pour la Production et l'Usage des Biofertilisants. Comme résultats, des progrès substantiels se sont réalisés en produits de santé animale, les biopesticides et la biomine.

Pour sa part, l'UNESCO a depuis les années 90 créer un programme dénommé Partenariats Scientifiques Université-Industrie qui consiste essentiellement à soutenir les collaborations entre les chercheurs africains et l'industrie. La majorité des 20 projets de collaborations université-industrie financées par des organismes internationaux sous l'auspice de l'UNESCO et du PNUD sont reliés à l'amélioration de la production et la transformation des cultures d'exportation et ceux de consommation locale (bananes plantains, tomates, sisal), les plantes médicinales et la gestion des déchets.

Certaines universités ont entrepris de fournir aux étudiants des instituts supérieurs techniques des programmes de formation sur mesure qui leur permettent de terminer leurs études avec une expérience de travail. Par exemple, l'Institut Sud Africain des Mines et métallurgie offre un programme coopératif qui débouche à un diplôme en génie chimique et extraction métallurgique au cours duquel les étudiants font douze mois de travail pratique en entreprise (Plooy et Guest 1998). Au Cameroun, une expérience de partenariat université-industrie semble faire des petits pas positifs depuis 1992. L'École Nationale des Sciences Appliquées a des contrats de recherche avec de grandes entreprises d'État dans le domaine des économies d'énergie, du bâtiment et des télécommunications (Vermande 1994). En Tanzanie, un exemple de contrat de recherche entre un consortium d'entreprises productrices de thé avec l'Institut Tanzanien de Recherche sur le Thé a permis d'améliorer la productivité et la production d'une trentaine d'articles publiés dans des revues scientifiques internationales (Carr 1999).

Il est fort curieux de constater que les quelques collaborations université-industrie qui existent sur le continent ne portent que sur les grandes entreprises et se préoccupent moins du secteur informel. Deux facteurs pourraient expliquer ce phénomène. La première raison est que les universités n'offrent pas de programmes qui correspondent aux besoins des petites entreprises et surtout celle du secteur informel. La deuxième raison pourrait être l'absence de la demande des sciences et technologies. En effet, les entreprises du secteur informel ne maîtrisent pas le langage académique et n'ont pas besoin de nouvel-

les connaissances et technologies pour survivre. Ce dont elles ont besoin ce sont des services conseils souvent élémentaires.

Conclusion : Implications sur les Politiques Scientifiques

Il n'existe pas assez d'études sur les collaborations université-industrie en ASS pour mettre en évidence qu'apprendre à apprendre des autres est un élément essentiel de développement technologique (Culter 1991). Nous souhaitons que cette introduction à cette problématique puisse ouvrir un débat plus large dans les milieux académiques, les gouvernements et des organisations internationales. En mettant l'accent sur l'importance de l'échange et le partage des connaissances, la discussion a montré que cette approche peut permettre aux entreprises de surmonter leurs limites structurelles liées au manque de financement, de personnel et de technologies. En insistant sur le fait que le défi des entreprises d'ASS n'est pas celui de produire de nouvelles connaissances et technologies mais de développer leurs capacités de les identifier, les adopter et les absorber, la discussion a montré que c'est plutôt l'apprentissage collectif des entreprises qui doit être au centre de la stratégie de modernisation industrielle.

La discussion suggère aussi que l'analyse des collaborations université-industrie doit tenir compte des spécificités économiques des pays. Les deux études les plus explicitement reliées aux collaborations université-industrie aboutissent à la même observation signalant par ailleurs que l'ASS a choisi les applications de la biotechnologie à l'agriculture comme porte d'entrée dans ce secteur parce qu'il y a un objectif lié au niveau de leur développement: celui de la sécurité alimentaire. La discussion permet de croire que les décideurs politiques, les chercheurs et les institutions internationales devraient élaborer des politiques permettant à aider les universités à répondre aux besoins des petites et moyennes entreprises du secteur formel et les activités économiques du secteur informel qui emploient la plus grande partie de la population. De plus l'embauche contractuelle des experts œuvrant dans les entreprises du secteur informel et formel est à encourager pour qu'ils apportent leur savoir aux universités.

De plus, la discussion a mis en relief l'importance de la circulation de l'information entre les partenaires du développement technologique. Ce défi est immense pour les universités et entreprises d'ASS qui vivent encore dans un environnement où manquent cruellement de journaux scientifiques, de route et de téléphone pour assurer l'échange d'information et les contacts interpersonnels. Ceci suggère qu'il faut s'y prendre de manière étagée, par exemple en essayant de promouvoir les journaux et non le recours aux technologies de l'information qui s'avèrent très coûteuses (Altbach et Teferra 1998).

Enfin, le lecteur risque de rester sur sa soif pour la simple raison que la discussion a suscité plus de questions que de réponses. Ceci se justifie par le fait qu'il existe très peu d'études sur les collaborations université-industrie dans cette région du monde et que la prudence exige que plus d'études empiriques soient conduites pour pouvoir apporter des réponses plus éclairées à la situation spécifique à l'ASS.

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Excellence, Relevance and the University: The “Missing Middle” in Socio-Economic Engagement

Beth Perry* & Tim May**

Abstract

The international political economy for higher education is marked by an increasing globalisation and regionalisation of activities. In this context an emphasis on the roles of universities as engines of economic growth and sub-national economic and social development can be seen. However, the de-contextualised nature of dominant neo-liberal global pressures gives rise to particular sets of issues for universities and a “missing middle” between contexts of knowledge production and application. This article explores these issues in comparative context, drawing on empirical work undertaken on regional science policies in Europe and considering the implications for African universities as they seek to fulfil a diverse range of scientific and civic roles. It is structured in three sections. First, it examines the global pressures that are leading to a rethinking and rescaling of science. Second, it analyses changing discourses around excellence, relevance and context and in so doing identifies a convergence in models of national science policy. Finally, it examines the implications for the global university order, including issues of stratification and diversification and a resulting tension that emerges between the expectations of higher education and their capacities to deliver. It is this missing middle that needs consideration if expectations and capacity are to be more realistically matched for greater benefit.

Résumé

L'économie politique de l'enseignement supérieur est marqué par une mondialisation et une régionalisation croissantes des activités. Dans ce contexte, un accent particulier est donné au rôle des universités comme moteurs de croissance économique et de

* Research Fellow, Centre for Sustainable Urban and Regional Futures, Manchester, UK.
Email: b.perry@salford.ac.uk

** Director, Centre for Sustainable Urban and Regional Futures, Manchester, UK. Email:
t.may@salford.ac.uk

développement économique et social national. Toutefois, la nature décontextualisée des pressions néolibérales mondiales créent de nouvelles préoccupations pour les universités et un lien manquant entre les contextes de production et d'utilisation des savoirs. Cet article explore ces questions dans un contexte comparatif, tirant des travaux empiriques effectués sur les politiques scientifiques régionales en Europe et considérant les implications pour les universités africaines dans leur effort pour jouer une gamme diverse de rôles scientifiques et civiques. Il est structuré en trois sections. D'abord il examine les pressions mondiales qui conduisent à un réexamen et à un redimensionnement de la science. Ensuite, il analyse les discours changeants autour de l'excellence, la pertinence et le contexte pour identifier une convergence dans les modèles de politiques scientifiques nationales. Finalement, il examine les implications pour l'ordre universitaire mondial, y compris les questions de stratification et de diversification et de la tension entre les attentes de l'enseignement supérieur et de ses capacités de satisfaction de ces attentes. C'est ce lien manquant qui doit être étudié si les objectifs et la capacité doivent être associés de manière plus réaliste pour plus d'efficacité.

Introduction

The centrality of science in contemporary political, economic and social life has been widely recognised (Turner 2003). It has been argued that the boundaries between science, society, politics and culture are increasingly blurred, leading to a de-differentiation between previously discrete areas of policy and action (Lyotard 1984; Gieryn 1999). This mirrors an epistemic permeability in disciplinary boundaries and a contestation over what counts as scientific endeavour (Knorr Cetina 1999). The result is that science is increasingly subject to the same pressures as any other area of public policy. Nowhere is this truer than in the context of a changing international political economy marked by dual processes of globalisation and regionalisation. Here a rescaling of the political governance of science and higher education policy has occurred in parallel with a rethinking of scientific justification and application. Science is valued in terms of its prestige-enhancing qualities as much as for its ability to lead to direct economic and social outcomes. Yet the excellence/relevance debate is unproblematically mapped onto a global/local dichotomy, reflecting a shift towards a dominant neo-liberal paradigm for science and higher education in which national and regional differences apparently evaporate in favour of abstract global forces. While distinct national and regional research cultures are leading to an enduring divergence in policy approaches, pressures for convergence outweigh those for heterogeneity.

For universities the consequences are far-reaching. Contrary to accounts of demise and de-legitimation (Readings 1996; Smith and Webster 1997), it is not the existence or value of the university per se that is fundamentally chal-

lenged. This is not based on any reasoned defence of the university as a space for reflection or balance to the freneticism of socio-economic imperatives (May and Perry 2006a). Rather, certain universities may often be the beneficiaries of a prevailing and uncritical view of scientific excellence as the holy grail of public policy, without due consideration of questions of justification, legitimation or application. What is at stake is the nature of the university system and emerging issues of position, power and hierarchy. Diversification of mission has been accompanied by a stratification of the university order in which universities benchmark against international league tables of research excellence. This jostling for position in relation to external challenges and opportunities has profound implications for the types of knowledge and expertise that are seen, valued, promoted or ignored.

The result is an international scientific-political economy which tends to be competitive, leaving issues of redistribution or equity to one side. A global order characterised by what is regarded as free rather than fair trade and the supposed inviolability of market forces has encroached into the domain of science, research and higher education. Economic success is seen to depend on the possession, commodification and ultimate exploitation of particular forms of knowledge. Certain epistemologies are promoted over others, exemplified in those disciplinary areas in which Western scholars are seen to excel with “one-size-fits-all” solutions imposed as a fix for development. Against such forces the outlook for African countries in establishing the profile and position of universities and their academic output may appear bleak. Yet there are opportunities, not least in reconnecting the production and application of knowledge in such a way as to create the possibility for the engagement of universities in society which is relevant to specific African contexts.

This article is based on research conducted through the UK’s Economic and Social Research Council ‘Science in Society’ programme between 2003 and 2006 on comparative regional science policies and university engagement in the UK, France, Germany and Spain.¹ Over 150 semi-structured interviews were carried out with senior university managers and policy-makers at European, national and regional levels responsible for science and research, higher education, economic competitiveness and regional development. These were supplemented by extensive documentary analysis of frameworks for action in different national and sub-national contexts. Through this work we make no claims to expertise in relation to the particularities of the African context; indeed our research approach is inherently characterised by a focus on context sensitivity (May 2005). Instead we focus on the implications of the research for the changing international political economy and the wider development

paradigm, as well as the lessons that can be learnt, rather than solutions imposed, for the African continent.

The article is structured in three sections. First, we discuss the implications of the restructuring of space and scale for the governance of science and higher education and offer an overview of recent policy developments at multiple scales that illustrate these trends. Second, we turn to a critique of the dichotomy between excellence and relevance that has emerged as a result. This is contextualised in the wider debate concerning convergence and divergence in the context of public policy approaches and research cultures. Third, we turn to the implications for the university as a key site of knowledge production and the emergent global order in higher education. Throughout this article we use the term “science” to mean knowledge in its broadest sense, encapsulating the social sciences, arts and humanities as well as the “hard” sciences, and discuss definitional issues further in this section in terms of the consequences of increasing specialisation on different disciplines and institutions. We focus on identifying relevant transferable lessons and highlighting opportunities, particularly in relation to the role of universities as engines of regional and national economic development, through addressing the “missing middle” between contexts of knowledge production and application.

The International Political Economy of Science, Research and Higher Education

Globalisation and the Knowledge Economy

Urban and regional scholars have focussed widely on the importance of the rescaling of state authority and the development of a knowledge-based economy as two of the most defining features of the contemporary world. The literature on changing forms and scales of governance in the context of trends towards globalisation and regionalisation highlights the growing importance of an increasingly diverse array of sub-national actors in political and economic processes, with concomitant implications for the nation state (Borras-Alomar et al. 1994; Brenner 2004; Storper 1995). While formal processes of devolution can be seen over the last twenty years across Europe, in which sub-national actors are seen as appropriate scales of action to redress issues of democratic accountability and economic competitiveness, a range of more informal and often unintended shifts in forms of governance has also taken place (Le Galès 1998). In the European context, authority and decision-making competences have been rescaled upwards towards supranational bodies, as well as downwards in line with notions of subsidiarity, characterised by some as a system of “multi-level governance” (Bache and Flinders 2004; Jeffrey 2000; Marks 1993).

It is not our purpose here to engage with the contours of this debate but merely to note that supranational and sub-national actors are gaining greater influence and legitimacy to act in a range of areas outside formally stated competences, thus contributing to debates on the end of the nation state (Ohmae 1995). Relevant sub-national actors can include democratically elected regional councils and assemblies, non-elected regional economic development agencies, metropolitan or city-regional authorities or local councils. We adopt an interpretation *à la française* of the terms “regional” or “sub-national” to refer to these varied *collectivités*, albeit acknowledging that there is a vibrant debate over the appropriate scales of governance for different public policy domains even among sub-national levels.

Public policy rhetoric in many Western countries increasingly focuses on the role of science, technology and innovation (STI) as the key to economic competitiveness and wealth creation, encapsulated in the “knowledge economy” paradigm. Academic analysis of the validity and value of this supposed paradigmatic shift is divided. For some the knowledge economy represents a new phase of capitalism or post-industrial economy (Castells 1996; Drucker 1998; Jessop 2002). For others the concept does not have any content, is ill-defined and is more “spin” than substance (Hellstrom and Jacob 2000; Luque 2001; Scarborough 2001). Yet such conceptual and theoretical debates are largely irrelevant. Policy developments are proceeding at a faster rate than theoretical and empirical evidence, advancing on the basis of suppositions with investments made in attempts to emulate perceived (rather than substantiated) best practice. In so doing, the link between science and economic development has led to a blurring of policy domains; science policy is increasingly complex (de la Mothe 2001) and linked to innovation and processes of wealth creation to such an extent, some say, that science, research and innovation policies are synonymous (Gibbons 2001). As a result of this emphasis a mutual reinforcement of the relationship between regional governance and science policy can be seen. Regions are becoming pivotal scales of action for economic development and competitiveness based on scientific innovation and excellence. In other words the international political economy of science and higher education is marked by both a rescaling and a rethinking of science.

Rescaling and Rethinking Science

A widespread, albeit often unintentional, regionalisation of policy for science, research and higher education is taking place within Europe. The UK provides an extreme example of this, moving in the late 1990s from a centralised system towards an asymmetrically devolved governance structure for higher education in Scotland and Wales.² Even in the absence of formal devolution to the

English regions, regional science policy governance has also emerged there. The nine English Regional Development Agencies (RDAs) have established Science and Industry Councils since 2004, bringing together academic, industry and governmental actors with the aim of linking science and research to wider regional socio-economic objectives. Most recently six Science Cities have been nominated by the Treasury to drive the UK forward in terms of innovation and economic competitiveness.³ In France the centralised or Colbertist system of research and innovation has also undergone profound changes (Mustar and Laredo 2002) in which the “collectivités” are increasingly important actors in the financing and shaping of policy priorities through the state-regional planning process, the “Contrat de Projet État-Région”. The German situation differs, given that the sixteen regional governments, the *Länder*, have traditionally had the greatest responsibility over higher education through the financing of universities, sharing responsibility with the federal government in certain areas of science policy and research funding. However, in the recent reforms of the federal state, the responsibilities of the ‘Länder’ in relation to higher education have been increased. In both France and Germany cluster-based policies also have strong spatial effects aiming to create agglomerations of critical mass bridging between the research and industrial base. Given the asymmetrical nature of the Spanish system, competences for science and technology vary between regions (Sanz-Menendez and Cruz-Cruostro 2005). An oft-cited example of developing regional competencies can be seen in the creation by the Catalanian government of the Inter-Ministerial Commission for Research, Innovation and Technology and a series of regional research plans (Charles et al. 2004; Dresner 2001).

Behind these shifts lies a series of differences in terms of drivers and dynamics. A certain convergence in the policy positions of sub-national actors can be identified as regional and local actors increasingly recognise the need to draw on endogenous knowledge assets as a precondition for socio-economic growth and to foster *innovative mileux* or “creative clusters” (Florida 2002; Simmie et al. 2002). Rationales for sub-national engagement with STI are driven by a range of concerns (Perry and May 2006). Science is a physical agent to achieve other non-scientific goals, such as the redevelopment of deprived or industrial neighbourhoods. Science also has symbolic value in terms of investments made in high-profile areas in order to rebuild regional identities. It may serve as a catalyst to the attraction of further resources or may be a transformational agent designed to directly impact on socio-economic objectives.

At the same time the direction of influence and drive for regional science and innovation policies differs. Developments in the UK have been largely

bottom-up, with a certain reluctance on the part of national agencies to accommodate the growing regional appetite for science and technology. A widespread enthusiasm from sub-national actors is motivated by the rhetoric of the knowledge economy, as well as by the need to address gaps in productivity and growth between prosperous and disadvantaged regions (Charles and Benneworth 2001). In France top-down pressures dominate, with variable yet increasing regional acknowledgement of STI and higher education as legitimate policy domains. Processes of regional capacity building and clusters are driven nationally by the need for new mechanisms for state intervention, the constraints on public budgets and the need for co-funders. Issues of political expediency are predominant in Germany, with decisions over the governance of science, research and higher education bound up in the wider debates over reform of the federal state, whilst cultural issues feature heavily in Spain in terms of wider processes of identity-building and global/regional positioning. In each case, the regionalisation of science, research and higher education policy is rarely motivated by considerations relating to scientific knowledge production, the appropriateness of scale or importance of context. Instead a complex set of economic, political and cultural issues interplay to influence and shape the governance of science policy.

The result is that science policy governance is increasingly contested. Here we enter into debates over changing notions of scientific production, justification and application (Gibbons et al. 1994). On the one hand the rise of regional science policy governance has highlighted the limits to a defence of scientific decision-making as an objective process. Science is deeply integrated into the fabric of modern societies and economies (de la Mothe 2001) and is at the heart of decisions about the environment, health, welfare and security (Stehr 2004). Science policy decision-making has never been immune to political pressures, but the divergence of actors involved in the formulation, financing and implementation of hybridised science and innovation policies further erodes an already fragile and contested notion of scientific objectivity (Williams 2005). The debate over the location of large scientific facilities can be seen as a good example of this (Perry 2006). On the other hand regional science policy can be seen as emblematic of the excellence/relevance debate. Recent theoretical developments in science and technology studies have posited fundamental changes in the criteria used for the production, justification and application of scientific knowledge, as embodied in notions of relevance, social utility and economic instrumentalism (Nowotny et al. 2001). According to such views science is assuming value as much for its economic and social benefit as for its prestige-enhancing ability, with an increasing emphasis on applied research

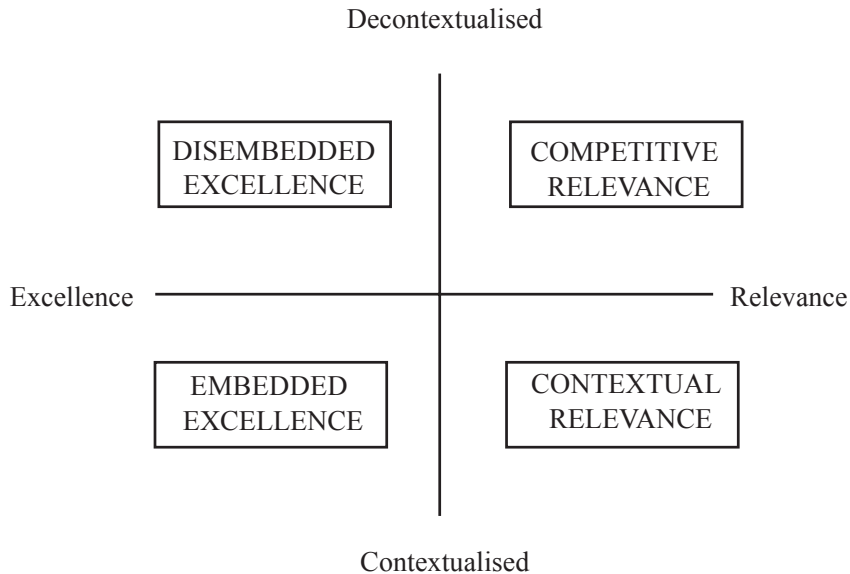
and innovation. Both excellence and relevance are contested notions; the focus here is on how the concepts are used in practice within different policy discourses.

Excellence, Relevance, Convergence and Divergence

From a conceptual viewpoint the interdependence and contextuality of excellence and relevance is complex. Taking the issue of interdependence, a dichotomous relationship is unhelpful; excellence can be relevant, and relevance can be excellent, regardless of funding sources or disciplinary areas. A temporal and normative dimension also comes into play. The unpredictability of scientific invention and breakthrough has been widely noted, and a 'shrinking of the field for research' (Ziman 1994) only limits the potential for future innovations. No amount of foresight activities can identify the long-term relevance of research beyond the demands of short-term political or economic imperatives. Relevance is subject to interpretative flexibility, encapsulating objectives and aspirations as diverse as economic wealth creation, social inclusion, civic debate and cultural diversity. Such definitional issues relate clearly to fundamental questions of who decides and who benefits.

If we map the excellence/relevance continuum against degrees of contextualisation (global/local), four different but non-exclusive discourses can be identified (see Figure 1). A "disembedded excellence" can be seen as traditionally non-spatial and global, with processes of knowledge production divorced from the context in which they are produced. Expertise is presumed to be highly mobile, with flows of research personnel and students following and thus enhancing existing quality, as judged by league tables or rankings. Distributive issues are irrelevant, both geographically and across institutions or disciplines, as no other criteria than quality is held to matter, as judged through peer-review. This perspective highlights policy approaches that focus on scientific self-governance, selectivity and the concentration of resources in existing centres of excellence, supplemented by efforts to attract and retain the best and brightest talent in terms of academic staff and students within an international environment.

The corollary to this is "competitive relevance". A decontextualised interpretation of relevance sees emphasis placed on the application of STI to specific economic or social issues and strategic priorities as a precondition for global success. The focus on biotechnology, nano-technology or genomics is a case in point. Research may be applied, with clear health-related outcomes for instance, but benefits do not accrue to any specific community or group; rather the commercialisation of technologies leads to competitive advantage for individuals or firms. This discourse leads to policies that focus on intellectual

Figure 1: The Contextualisation of Excellence and Relevance

property, university-industry links and spin-offs and business-led innovation, but without seeing context as either a contributing factor or intended beneficiary. In terms of finance, greater equality is attributed to third-party funds from industry or consultancy, alongside academic funds as a mark of quality. An emphasis on the increased steering of the direction of scientific research is seen, linked to wealth creation or the solving of global problems such as cancer, rather than wealth distribution. The outcome may still be concentration of resources in particular localities and institutions.

An embedded excellence discourse places greater emphasis on the indirect benefits of science and technology to particular places and spaces. This viewpoint implies no challenge to the underlying criteria that are seen, at least explicitly, to drive scientific investment, but accepts that there is a spatial dimension to excellence. This does not relate to changes in processes of knowledge production; rather it seeks to exploit knowledge products and institutions for territorial benefit. Expertise is still assumed to be mobile, but the role that particular environments play in influencing this mobility assumes greater importance. Policies focus on the attraction of “world-class” facilities and expertise or international students through the creation of favourable

framework conditions and are based on assumptions over the benefits that will indirectly accrue, without any necessary consideration of mechanisms necessary for their realisation. Efforts may be invested to capitalise upon the presence of scientific institutions as regeneration catalysts and agents in the redesign of physical space within particular localities. Partnerships may exist between strategic managers within universities and local partners for instance, but this has little impact on the day-to-day activities of academics.

Where embedded excellence is about extraction and attraction, contextual relevance refers to the shaping and creation of research excellence and expertise. The emphasis is as much on the processes of knowledge production as on exploiting particular products. Here we see a concern with what goes on within scientific establishments in terms of the generation of genuinely co-produced research priorities and agendas. Nationally there may be greater emphasis on the distribution of scientific resources in terms of their acknowledged effects on economic development. Skills, training and widening participation agendas assume wider importance within broader processes of knowledge transfer, not only encompassing a linear-dissemination model but also placements, apprenticeships and incentives for staff to spend time in other sectors. An emphasis on spinouts can also be seen but underpinned by a concern for outcomes for particular groups rather than pure numbers as an indicator of success. Policies emphasise how to connect the research base, both public and private, with industry, as well as issues of social inclusion or economic opportunity. Whilst this discourse appears to be the polar opposite of disembedded excellence, quality is still deemed to be important, but it is judged according to a wider set of scientific, social, economic and political criteria. What is at stake is the values that are seen to inform decision-making and issues of how benefits from STI will be realised in practice. In this respect it is here that we find the greatest challenge to the status quo in terms of issues of justification, legitimation and application.

This characterisation necessarily overemphasises difference in order to illustrate the way in which context appears in different discourses. Indeed, in practice, there are many hybridisations, with different rationales for scientific investment and distribution at multiple scales. There is no simple correlation between tiers of governance and particular positions. In England national government departments and funding agencies tend not to see context, whilst in France and Germany particular hybrid discourses have emerged that combine a traditional concern with social equity and redistribution with the recognition that more competitive strategies are required in the current global economy. The French “pôles de compétitivité”, for instance, aim at raising the competitiveness of all regions, whilst additional resources are available for the

most successful. The German federal approach equally demonstrates policies aimed at concentration, such as the current “Excellenz” initiative, with those more concerned with the development of innovative capacities in the Eastern “Länder”.

At the same time context-sensitive policies do not necessarily emerge from regional governance or autonomy. Regional actors such as the German “Länder” or the Spanish autonomous regional of Catalonia, with long histories of regional funding of universities (Charles 2006), enact decontextualised science and higher education policies, and many regional actors have little concern for issues of equity or redistribution in their quest for global position. The dominant discourse of the English regions can be characterised as embedded excellence, with those arguing for a more context-sensitive approach largely sidelined in the search for global success.

Identifying distinct discourses according to national or regional contexts is clearly problematic. Yet the disaggregation of national and regional interests according to different policy domains reveals a certain clustering of positions that cut across scales of governance. Scientific discourses relating to the contextualisation of the excellence/relevance debate are shaped not by the boundaries created through geography or governance but by those relating to spheres of previously discrete activities. For instance disembodied excellence largely characterises the discourses of those charged with science, research and higher-education policy; competitive relevance encapsulates the dominant policy rationale within economics or trade ministries or sections; those responsible for regional economic development and innovation at national and sub-national levels tend to coalesce around an embedded understanding of excellence, focussed on the attraction and then exploitation of particular products and scientific institutions; while relatively little attention is given to the notion and potential of contextual relevance, with those who speak in its name dismissed as “political” or naïve. While there tends to be little cross-departmental discussion, a recognition of the interrelationships between science and economics is reflected in the restructuring and merging of national ministries for science, research and economics in the UK, Germany and France (Dresner 2001).

Recognition of national heterogeneity in higher education and research is explicitly at the heart of most recent European developments (Communiqué of the Conference of Ministers Responsible for Higher Education 2003: 2). Despite moves to strengthen European level institutions, such as the European Research Council or European Research Area, the explicit emphasis is on divergence in approach within common frameworks (Senker et al. 1999). Jasanoff (1997) notes how global elements of convergence are filtered (and diluted)

through national systems relating to the boundaries and autonomy of STI in the context of the fragmentation of the state as the traditional unit of analysis. This is undoubtedly the case, and distinct national responses to the challenge of the global knowledge economy are evident. Nevertheless, in practice, a certain convergence is emerging through a decontextualised understanding of both excellence and relevance.

Disembedded excellence and competitive relevance dictate the contours of the emerging neo-liberal knowledge economy. Neither space nor territory are valued in the search for global success, and any understanding of the contexts within which excellence or relevance can be built is limited and partial. The tolerance of a context-sensitive approach to science, research and higher education is confined to a particular way of seeing regions and cities as funders and indirect beneficiaries of scientific investments. Regions are permitted to exploit scientific products and institutions, to do relevance, leaving national agencies to be seen as the guardians of excellence. Regional science policy is largely synonymous with second-rate science, and recent debates in England have highlighted how the role of regional agencies even as funders of research is contentious in this respect. Even within regional and local contexts we see a paradoxical defence of the supposed supremacy of an uncritical notion of scientific excellence and the infallibility of peer-review processes (Perry 2006). Sub-national actors have predominately bought into a narrow excellence paradigm to the exclusion of issues of distribution, equality or social cohesiveness. Contrary to a European model of balanced growth the result is competition (Sharp 1998) and an increasing concentration of research excellence in particular localities in which the philosophy of “survival of the fittest” reigns supreme. The next section turns to the implications of these changes for universities as distinctive sites of knowledge production and the global university order.

Universities and the Regional Agenda: Third Mission as Last Choice

In the face of these pressures how are we to understand the role, place and future of the university as a centre of research production and transmission? In seeking to illuminate this question, we may first observe that universities are subject to many different expectations as expressed through policy frameworks at international, national and local levels. Universities have varied roles to fulfil including:

- to educate and train students
- to produce excellent research according to peer-reviewed criteria
- to innovate in order to enhance productivity through collaborative relations with external partners

- to produce relevant research according to the needs of client organisations
- to make socio-economic contributions to their localities and businesses in general and to enhance civic value in the public realm (Clark 1998).

Overall the production of knowledge is a function that the university has always been well placed to fulfil, but a premium is now placed on extracting economic benefit from university-based knowledge. What was often an assumed benefit is now open to scrutiny and competition from other sites of knowledge production (Fuller 2000; Gibbons et al. 1994). Developmental opportunities for universities relate not simply to innovation through connection to business but also their roles in relation to social welfare and skills development. For these reasons the pedagogic role of universities and their contribution to social and cultural issues are key. Universities not only produce knowledge but also disseminate that knowledge to students and thus perform a public role in the sense of bringing people together in what is increasingly an individuated world (Beck and Beck-Gernsheim 2002).

We have seen an increased emphasis on the civic or moral duties of universities to serve the communities in which they operate, alongside changing ideas about their value and role in society (Delanty 2001). For some commentators the most valued role of universities is as sites of knowledge diversity in a world in which the legislators seek order (Bauman 1989). A “value production” role is one that has long been attributed to the university. Yet the producing and reproducing of values is now even more important in a multi-ethnic, multi-cultural rapidly changing world in order to root ethics and morality in future generations and thereby reflect the diversities, rather than hierarchically-inspired orders, that exist in contemporary societies (Bauman 1997).

Taken together, the diversity of roles ascribed to universities have given rise to the notion of the “third mission”, that is, the acknowledgement that universities have functions beyond research and teaching that relate to their wider economic, social and civic roles (Harloe and Perry 2004). The rise of “third leg” funding accompanies this shift, as public spending on research and development alone falls well short of international or national targets. Sub-national actors are vocal proponents of the third mission and increasingly look to universities, within broader science and innovation policies, as tools of development and engines of growth (Castells and Hall 1994). Regions have increasing expectations from universities, as STI is hoped to deliver reversals in economic fortune and the rebirth of new territorial identities. From the point of view of universities a complex mix of altruism and instrumentalism incentivise this engagement in terms of acknowledging the legitimacy of demands upon

them as publicly funded institutions, coupled with the need to search for additional finance in the context of budgetary constraints.

Inherent in these diverse roles are sets of expectations which embody different values. Their overall balance is mediated via different frameworks for action at multiple levels of scale with incentivisation through alternative funding streams. It is here that the international political economy described earlier comes into play. Mixed messages are apparent in the drives for international excellence and collaborations for regional benefit. It is held that research needs to be conducted at an international level in order to meet criteria of world-class excellence. Yet it also needs to be embedded in local and regional contexts if the kinds of benefits expected from knowledge for the economy are to be realised within its locality. The decontextualised nature of the neo-liberal paradigm leads to sets of assumptions that research excellence will lead in some way to relevance in a given locality, as if there were some automatic connection between the place in which a university is located and its benefits to that area.

The dominance of the disembedded excellence or competitive relevance discourses give rise to further assumptions about connections between research, teaching and third-mission activities which dictate “appropriate” measures of success for the university. Ideas of knowledge transfer, for example, tend to rest upon outputs that are measurable according to patents and/or the setting up of new companies. Matters of organisational accountability are set according to targets; performance is judged by the ability to attract resources, and economic impact is mediated through the production of spinout companies, patents and the attraction of inward investment, whilst research and teaching scores are taken as demonstrable indicators of excellence.

Clear tensions can be seen in the aims and aspirations for universities; the civic role of the university, for instance, has the potential to sit in tension with the importance placed upon knowledge as a commodity. A hypodermic model of knowledge transfer dominates who judges the worth of what is produced according to a narrowly conceived economic instrumentality measured according to impact and outputs. In these circumstances, different academics play particular roles, bolstered by the contexts of their knowledge production, about which they remain largely indifferent. The idea that individual characteristics are solely responsible for excellence and/or innovation is promoted through, for instance, the teaching of entrepreneurialism and enterprise as specific fields of study. “Character” is of course an important component, but focussing on this alone gives rise to an indifference to institutional conditions of knowledge production that allow claims to expertise freed from context. These contexts are political as well as social, economic or cultural. For instance, Dresner notes

how the scientific community in Germany exploits the difficulties in reaching political agreement between the federal and 'Länder' governments to obtain an unusually high degree of autonomy (Dresner 2001: 110). Individualistic cultures are perpetuated in which claims to professional autonomy on the part of academics are prioritised over the necessary condition for its attainment: that is, institutional autonomy (May 2005). What is then created is a vulnerability to the effects of those changes upon academic cultures, which seeks changes in how practices occur through measures of what they produce. Overall this produces an indifference to context which is replicated in claims to academic professionalism (May 2006).

This results in a confusion of expectations. First a confusion of expectations and incentive structures leads to demands from policy-makers, politicians and university managers for programmes to demonstrate relevance in the short-term, as well as more sustained and long-term programmes of work in the pursuit of excellence. "Quick hits" drive criteria of relevance in ever-greater demands to service the economy, with some referring to a resulting "academic capitalism" (Slaughter and Leslie 1997). Yet it is the search for excellence that dominates, producing hierarchies according to abstract league tables. The flaws of such tables may be widely noted, but this does not stop the frenetic drive amongst universities to attain a place in the rankings. Institutions tend to compete rather than collaborate, aiming for the elusive label of being world-class. As a result some universities may be "in", but not "of" their localities (May and Perry 2006b). Those elements of third-mission activities that support this world-class role, such as collaborations with industry or the receipt of regional monies, are embraced as a stepping stone to global position, the result being that the less visible yet arguable more socially or economically relevant activities are relegated to the domain of the less prestigious universities. Diversification in role then accompanies stratification in university systems with the third mission becoming the last choice for those universities outside the upper echelons of the global hierarchy.

The issue is that sub-national expectations are not equal upon all universities. Elite universities in the top world rankings are highly valued for their assumed benefits, yet it is other institutions that must deliver on agendas relating to the third mission. Research culture comes into play here. The autonomy of the professors and their right to determine their own affairs is constitutionally enshrined in Germany, whilst the widespread strike by French scientists in reaction to proposed reforms to the research system in 2004 led to a reversal in French policy. Even in more neo-liberal systems regional demands on universities are largely restricted to being physical agents, attractors and political partners. What we see then is a certain power of science to protect itself, contrary

to accounts of demise and delegitimation in the face of an encroaching relevance, but this power relates to a position in regional, national and global hierarchies.

Disciplinary consequences also ensue. So far we have used the term “science” in its broadest sense, without disciplinary specification, to incorporate the social sciences, arts and humanities. Yet differential value is attached to types of knowledge and expertise in the context of the pressures we have described. The physical sciences have tended to be more greatly valued in terms of their potential economic benefits thus far, despite a recognition of their intangible and uncertain outcomes at different time frames. Doubt remains over the proportion of viable spinouts that can be created in the life sciences vis-à-vis the huge investments needed, but there has been little systematic research in this area (Nightingale and Martin 2004). Conversely, the potential contributions of the social sciences, arts and humanities have been largely ignored, despite recognition of the “softer” side of innovation processes, the need for context-sensitivity and the importance of tacit and embodied knowledge as well as that which is codified and explicit (Baumard 1999; Polanyi 1996; Simmie et al. 2002). Not only disciplines but also broader epistemologies are at stake in terms of the value attached to different forms of knowing (Harding 2006). The “sexy” triumphs over the mundane, the tangible over the intangible, outputs over outcomes and narrow ideas of measurement over the generation of understanding.

Not surprisingly these pressures have led to a series of organisational transformations within universities that have varying institutional consequences. First the balance between steering and autonomy of universities is changing (Wagner 2004). In Germany and France increased efforts to direct universities and programmes of research have been paradoxically accompanied by increased autonomy for universities. Steering is related to governance structures and the nature of central-local relations (Senker et al. 1999), hence the importance of clarity in science policy-making in the recent reforms in Germany. Autonomy is seen as a prerequisite for both scientific excellence and economic relevance, with incentives and project-based funding used as policy levers to influence academic behaviour. The aim is to replicate a UK competitive model of higher education and research by reducing direct state influence, increasing indirect mechanisms of incentivisation and introducing greater instability and flexibility into the system through, for instance, a reduction in recurrent funding.

Second, internal coordination within the university needs to be appropriate to meet external expectations. The traditional centralised and bureaucratic mode of organisation of the university is challenged by the need to respond flexibly to increasingly unpredictable environmental changes and engage with the varying needs of different localities and social groups. New organisational forms

are said to be required that enable interpretations of environmental changes to be rapidly implemented into organisational responses. A balance between centralised bureaucracy and flexible forms for the university demands not only imaginative management and appropriate design but also the right mix of skills, values and knowledge among personnel across organisational units. Yet this raises a complex set of issues for those working in universities in respect to their purpose, as well as questions over what can be reasonably expected of higher education in relation to its positive impact upon social and economic development. Translating opportunities into tangible realities poses a number of significant challenges. These need to be managed in ways that are not indifferent to current practices and sustainable futures in particular contexts.

Meeting such challenges raises issues of leadership and management. Universities may have ambitions to be international in order to attract inward investment, but they will also need to be sub-regional and regional to be of benefit, to attract additional types of funding and to mobilise the type of political support they require to survive. This means examining the relationship between intended and actual results. It also requires political leadership which effects closure on otherwise open-ended terrains and which is willing to learn and admit mistakes. The presence of such leadership is not a sufficient condition to prevent the free play of different interests. However, it is a necessary condition to ensure benefit beyond the narrow interests of associated institutions, organisations and professions. Difficult questions are then raised in terms of the management of conflicting aims which can easily become internalised within the organisation and heighten degrees of politicisation of its purpose and processes. These issues are often ignored and instead manifest in the need to engage in organisational restructuring which focuses on process without due regard to purpose, or the constitution of visions that have no meaningful content in terms of any specific activities that will make a difference to its future.

In the process of university transformation rhetoric rapidly overtakes action, as well as the pursuit of product over considerations of purpose and value (May 2001). Such is the speed at which change is sought, little attention is given to a number of underlying issues that need to be clarified and addressed as a sound basis for moving forward. As a result potential remains unrealised. Universities need to be far better at processes of communication internally and cross-institutionally, particularly given the difficulties created by an audit culture (Power 1999). People working in universities are unlikely to find yet more initiatives for third-mission activities appealing when suffering from initiative fatigue. Innovation is often no more than the forgetting of history and the importance of context. In the case of African countries the pursuit of globally

induced objectives, without the level of investment that is enjoyed in the West for universities, will only exacerbate the problems. In context it is the reasonable and attainable gap between the actual and potential according to particular values and goals that needs to be addressed in partnership with communities, the voluntary sector, local, regional and national government and business.

Despite these issues relatively little is known about the contexts which enable and constrain the relations that exist between policy expectations and the actual capacity of universities to deliver to different groups. Instead we move from initiative to initiative without sufficient learning from experience, leaving expectations being either too impractical or unmet. Contexts matter, yet models are all too often pedalled as one-size-fits-all solutions or as development fixes. Beware those who have ready-made solutions to problems, as they commit the fallacy of believing that the model of reality has become the reality of the model. Content-less policy initiatives are left to be populated by varying interests, without sufficient time for consultation or a general understanding of the conditions for success. As a result a “missing middle” exists (SURF 2006) between the aspirations for universities in relation to socio-economic development, the nature of policy frameworks, the governance of spatial relations and organisational forms and capacities. Policy initiatives are driven by a self-perpetuating hype in which the search for excellence becomes its own *raison d’être*. The missing middle is populated by a series of issues that need to be directly addressed. Here we mention two that we feel are of particular significance to the African context, given the need expressed by many for African universities to have a greater role in the social, cultural and economic development of the continent (Juma 2005).

First, what are the relations between the cultures of academic production and reception of knowledge which do not assume simplistic hypodermic models of knowledge transfer? Here the importance of academic mobility is of key significance. If there is a need for highly skilled personnel, their export to other countries without a corresponding inflow is then problematic. Issues of retention need to be addressed, which means developing links and opportunities between universities and local and regional organisations and establishing the distinctive value of African universities. Second, there are issues of the location of a university in relation to socio-economic development and the coherence and consistency of governance structures. Whilst we have described the ways in which much policy has become regionalised, this does not relieve national states of the need to ensure equity between regions and between states to ensure that there is added value through cooperation. In the case of a diminished role of the state in developmental policies, it will be the weaker, poorer and less accessible regions that will stand to lose out. Creating inward competition for

scarce resources does not relieve governments of their responsibilities for social justice. Without this in place the strong simply get stronger, leaving the weak in their path.

These are just some of the issues that have not been subject to systematic and comparative research and yet directly influence the effectiveness of initiatives that involve universities in collaboration with various social, economic and civic partners at different levels of scale. Without this understanding in place the distinctiveness of the university as a site of knowledge production, transmission and reception is diminished and so too is its contribution to socio-economic development at local, regional, national and international scales. Issues around the mixed messages of policy and institutional capability constitute an urgent need for a proper assessment of the relations between expectations and the capacity to deliver. We hear a great deal about “what is to be done”, but much less about ‘by whom, with whom, with what capacity and according to what desired effects?’

Summary

The changes we have described operating at a global level are symptomatic of the intangible in search of the unattainable. Here we find content-less concepts without concern for context as if they can float freely from the tangibilities of particular localities. These neo-liberal dreams always have victims, and they are always the poorest. Yet ours is not a defence of some nostalgic dream for a by-gone era of institutional autonomy, but instead an appeal for a more nuanced understanding of the place, value and role of universities in society more generally. Such an understanding is being sidelined in favour of government edicts and the supposed nature of the global economy. What we see are sets of expectations on universities from national as well as regional agencies. Yet there are real issues over the capacity of institutions to deliver, particularly in the context of funding frameworks and dominant policy rationales that encourages particular behaviours. There is a mismatch between expectation, capacity and context that needs to be addressed if the potential advantages of university engagement can be realised without of course compromising the integrity or quality of what is produced.

What is lost in all this is a sense of what is distinctive about the university. For some this means universities exhibiting processes of “unhastening” that deliberately slow down the so-called environmental, economically-based imperatives and resist the de-differentiation of spheres of activity which has in any case been greatly exaggerated (Pels 2003). This requires a shared understanding of the organisational contexts necessary in order to produce and transmit knowledge that is unique. In the absence of this what is the future of

the university and why would people wish to work there? This is where a balance between the short and the long term is required. In search of distinctiveness we can say that a combination of particular professional cultures and the speed of knowledge production lead to a different form of knowledge. Without a proper understanding of the distinctiveness that universities as sites of knowledge production provide, which would allow for a clearer defence of their role and value in society, justification easily becomes the province of those whose interests lie in other contexts. Not only can this undermine distinctiveness but also the legitimacy of their activities that ultimately rest within the public realm. It is time to address these matters with sensitivity to context which implies neither a context dependence nor an abstract universalism.

Notes

- 1 This article reflects on the main conclusions of the 'Building Science Regions in the European Research Area' project carried out between 2004 and 2006. We gratefully acknowledge the support of the ESRC Science in Society programme in funding this work (RES-151-25-0037).
- 2 This is characterised by a dual system of funding in which project-specific research income is allocated through the Research Councils subject to UK-wide competition, while recurrent institutional and quality-related funding allocations are organised within each of the devolved territories.
- 3 Bristol, Nottingham, Birmingham, Newcastle, Manchester and York.

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