Adaptive Responses to Curriculum Restructuring Policy in Two South African Universities: An Enquiry into the Identity Projections of Academics Disposed Towards Change.

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CONTENTS

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ABSTRACT

This study contributes to the debates on how academics in higher education institutions respond to exogenous pressures for change, especially policy-driven reforms. To address this dimension of institutional adaptation, the study examines one particular policy initiative, which is the shift towards a programmes-based definition of higher education in South Africa, an approach which calls for greater emphasis on interdisciplinary, market-responsive and equitable undergraduate programmes. The policy calls for a shift away from autonomous approaches to constructing and delivering curriculum, and towards collaborative programme teams operating across traditional disciplinary boundaries, thus involving a significantly different normative orientation on the part of academics.

The literature on higher education adaptation, however, focuses on the strong capacity of the system to resist exogenous pressures which are at odds with the internal value systems of higher education. This study, by contrast, focuses on the minority phenomenon where academics appear to comply substantively (rather than merely rhetorically) with the policy, and considers the motivations and aspirations informing such academics, and their experience of the restructuring initiative. This interest in the stability or change in academic identity (the professional dispositions of academics) rests on an assumption that adaptation at institutional level depends in large measure on the dispositions that exist at the level of individual actors, and within the organizational sub-units that constitute institutions.

The study traces the implementation of the policy at two broadly similar universities, focusing on the science and humanities faculties, and data for the study were obtained from interviews with academics, as well as institutional documentation. The analysis (drawing on frames developed by Mary Douglas and Basil Bernstein) develops a typology of the adaptive dispositions of academics in terms of their varying orientations towards discursive order (away from discipline-based principles of curriculum), and towards social order (away from departmentally-based associations), and documents the experiences of academics who try to change these orders. The thesis concludes that adaptive orientations tend primarily to be motivated from the

CHAPTER ONE: INTRODUCTION TO THE STUDY AND RATIONALE

> This tension in the political or policy sphere between utility and freedom, between steering and serendipity, runs parallel to the tension in the economic sphere between bounded resources and unbounded needs in research and development. (Elzinga, 1987)

1.1 Introduction

The broad context for this study is the issue of how higher education institutions, or more particularly the academics who constitute them, respond to exogenous pressures for change, especially those pressures originating from attempts by the state to steer the higher education system in particular directions. The study contributes to a tradition in the literature which debates issues of institutional change in terms of the social construction of identity, and the extent to which the value systems articulated in policy reforms match the value systems of individuals and groupings within the institutions targeted by the policies. This literature (discussed in Chapter Two below) suggests that the amenability of social groups to externally-prompted reforms is broadly commensurate with the extent to which the reforms appeal to the values which inform their identities, or deep professional and personal commitments.

In order to address the issue of institutional adaptation, this study examines one particular policy initiative (discussed more fully later in this chapter): the shift towards a programmes-based definition of higher education in South Africa, an approach which calls for greater emphasis on interdisciplinary and transdisciplinary programmes which are responsive to the needs of the economy, equity and development. One key implication of this policy initiative, informed by outcomes-based approaches to education, is a call for a shift away from autonomous, individualist approaches to the construction and delivery of curriculum towards collaborative programme teams operating across traditional disciplinary boundaries. This proposed shift from an insular to a connective mode of association would involve a significant change in the normative orientations of academics. For example, where once the personal authority of specialist expertise sufficed to make curricular decisions, this must now give way to the negotiated authority of a multi-disciplinary

collective of peers, or to the authority of the market, or to the authority of the pedagogic technologists who monitor outcomes-based methods and conformity with the national qualifications framework, or even all of these.

Responses by academics to such pressures often focus on the issue of academic autonomy, a quality deeply prized in the academic community. This autonomy (sometimes called 'academic freedom') involves "the right of individual teachers and researchers to pursue knowledge, and to choose what they will assert in their choice of subjects for research and teaching without fear of prosecution from any political, religious or social orthodoxy" (Moja, Muller & Cloete, 1996: p. 134). In the contemporary academy this freedom is perceived by some to be under threat, especially from policies which seek to strengthen managerial control over academic practices. But even as the trend of burgeoning managerialism has taken hold on institutions internationally, the research literature on the subject has suggested that "the reforms associated with new managerialism have been rather more ambiguous, contested and contradictory than [managerialism's] advocates or theorists anticipated" (Reed, 2002: p. 173). A significant feature of this literature has been the emerging evidence of the capacity of academics to confound the intent of managerial or policy initiatives and retain significant levels of autonomy. As a consequence of this and other factors, higher education institutions are notoriously difficult to 'steer', either from the vantage point of the state, or from that of institutional management. Many studies (as I shall show below) discuss how autonomy is constituted in the academy, and how the associated capacity for refusal works to frustrate or distort external or managerial efforts to drive institutions in one or another direction. It seems, by and large, that academics work successfully to retain their autonomy in spite of varied attempts to diminish it. In this study, my interest is not in the now relatively well-trodden path of understanding the nature of resistance to exogenous pressure, but is rather in the contrary condition, that relatively rare (and under-explored) phenomenon where academics appear *willing* to accede to pressures for change, and in so doing seem to surrender a measure of their autonomy. My interest is thus in the motivations and conditions that inform contexts where adaptation does seem to happen, and whether these contexts may be inhabited and driven by academics with particular, or changing, dispositions. The goal therefore is to shed light on the issue of institutional

adaptation not by looking at the phenomenon of resistance, but rather by looking at instances of apparent adaptive compliance.

A considerable body of literature (e.g. work by Clark, Becher, Trowler, Henkel, Maassen, and Bernstein, reviewed in Chapter Two below) accounts for the behaviour of academics in terms of the value systems and cultures which orient academics towards particular sets of practices. I follow these authors in using the notion of 'identity' to refer to the professional dispositions of academics, and the social relations they sustain with each other and with the institutional structures of the academy. Enquiries into the stabilities and changes in academic identities are predicated on an assumption that adaptation at institutional level rests on adaptations that are possible at the level of individual actors and the organizational sub-units that constitute institutions. The literature presents a convincing case for why certain pressures for change are resisted or subverted at these levels; what is less clear is why some academics comply with policies that many of their colleagues have resisted. This study thus seeks to understand the motivations and dispositions underlying the relatively rare cases of apparently substantive compliance in this policy context. In particular, the study aims to illuminate the challenges presented by attempts to pursue new forms of collaborative or cross-border collegiality as is required by the policy. This policy requirement stands in contrast to the traditional authority, autonomy and insulations which characterize academic life, and which rest on values deeply cherished by those for whom the production of knowledge is a central professional preoccupation. An exploration of these exceptional cases aims to shed further light on the complex issue of organizational adaptation in higher education by focusing on a small but significant trend of compliance that runs counter to the broader trend of resistance (in its various forms), providing a view of how such academics represent themselves, and the account they give of their values and motivations. The study thus aims to explore the complex motivational space that exists between what is often represented as the dichotomous dispositions of 'refusal' on the one hand and, on the other hand, what is sometimes taken to be 'surrender'. Does the compliance trend represent the beginning of a shift in the orientations of academics in the directions suggested by the policies? Are academics who comply with the policy in fact acceding to these encroachments on their traditional autonomies, or are other motivations guiding their actions? What has been their experience of forming

associations across traditional boundaries? The study thus aims to provide some insight into the dispositions and conditions which inform what could be seen as one adaptive edge of the institutions under study. In this way, the study aims to reflect on the validity of the assumptions underlying the policy, as well as deepening an understanding of the processes of institutional adaptation in higher education.

This chapter proceeds by sketching the policy context for the study, outlining how the policy suggests a weakening of autonomy for academics. This account also notes the discursive resources that have been recruited to support the restructuring policy, since it may be useful to compare these against the motivations advanced by academics who respond to the policy. The chapter concludes with a brief overview of the rest of the study.

1.2 Curriculum restructuring and the encroachment on academic autonomy

Many (if not most) higher education systems internationally have been under pressure to respond and adapt to a variety of forces, including massification, the changing role of higher education in globalising economies, and changing relationships between higher education and the state. As Maassen & Cloete (2002) have observed, the traditional relationships between the state, higher education and broader society have begun to change in complex ways that bring pressures to bear on the structures and practices of these systems. As a consequence, higher education systems have been the subject of various reform initiatives, often initiated by the state but sometimes by the institutions themselves. These reforms have had uneven and sometimes quite unintended and counter-intuitive results. Efforts to account for the consequences of policy reforms suggest that the policy process, rather than being causal and linear, may in fact be a more complex, interactive process which works between the multiple actors and competing discursive frames at play within the field (*ibid*: pp. 50-52).

South Africa's higher education system contends not only with these global changes, but also with efforts to restructure a system characterized by extraordinary distortions that are a legacy of successive apartheid governments. It is not my intention at this

point to provide a comprehensive account of these developments, but I will sketch briefly some of the key features of South Africa's system that are relevant for this study. In this section, I draw extensively on Bunting's (2002a) summary of the South African higher education landscape under apartheid.

Until 1994, South Africa's 36 higher education institutions were each designated for the exclusive use of one or another of the four race groups (African, coloured, Indian and white) identified by the government, and admissions to any institution for a student from other than the officially designated race group was by permit only. Such permits would only be granted, the state vowed, if the applicant's proposed programme of study was not available in the institutions set aside for the applicant's race group (Bunting, 2002a). The current literature on South African higher education thus often refers to institutions by their racialised histories: "historically white" or "historically black" institutions, with finer subdivisions, including "historically white English-medium" or "historically white Afrikaans-medium" institutions, reflecting, in this case, the respective languages of instruction.

South Africa's universities[1], because of their respective histories and their role in the politics of the country, came to be differently positioned in relation to the apartheid state. One key division was between those historically white universities which lent explicit support to the Nationalist Party government (usually Afrikaans-medium universities), and the historically white English-medium universities which referred to themselves as 'liberal universities' and were less amenable to the purposes and policies of the state, although they were substantially dependent on the state for subsidy funding. The effect of these differing stances toward the apartheid state was reflected in differing student enrolment profiles, and in differing orientations to research. The English-medium institutions made extensive use of the ministerial permit system to admit black students into their mainstream programmes, with the result that by 1993, 38% of students registered on these campuses were either African, coloured or Indian. By contrast, the Afrikaans-medium institutions made scant use of

[1] South Africa's 36 higher education institutions were divided into two categories, 21 universities and 15 'technikons'. Ostensibly this distinction was based on whether an institution was primarily engaged in 'pure science' (universities) or 'applied science' (technikons). In reality this distinction between activities was hard to maintain. Current efforts to restructure the higher education landscape include

this device, and by 1993, barely 11% of students were African, coloured or Indian, and these tended to be postgraduates who did not need to attend classes on campus. The differing research orientations saw the Afrikaans-medium institutions prioritise instrumental forms of research which were consistent with the socio-political agendas of the apartheid state, while the English-medium institutions tended to be somewhat less instrumental, including 'curiosity' research amongst their priorities (Bunting, 2002a: pp. 65-74).

By the advent of South Africa's 1994 transition to democracy, the higher education landscape was skewed in ways that sustained the privilege of the elite institutions designed to serve the needs of the minority white community, while the institutions designated to support the needs of black communities were significantly disadvantaged by their apartheid identities and histories. The reconstructive challenge facing policy-makers was enormous: not only would the racially-configured landscape need to be redrawn, and the system re-modelled to provide an engine for restructuring the socio-economic dispensation of the country, but the system would also need to be responsive to the range of dynamics that currently also challenge higher education systems internationally.

The approach to system governance (and policy making) adopted in the first few years after 1994 was a system of 'co-operative governance' which envisaged the state, as the dominant partner, in a collaborative relationship with institutions and other stakeholders, engaged in a process characterized by "consultation, participation and transparency" (Cloete, 2002b: p. 422). Until 1997, this promise was carried out in exemplary fashion, resulting in the production of two influential policy reports, the National Commission on Higher Education: A Framework for Transformation (NCHE, 1996a), and the Education White Paper 3: A Programme for the Transformation of Higher Education (Department of Education, 1997). After this period, and as implementation of the broad goals proposed in these reports became the priority, the consultative process gave way to more directive forms of government steering. But throughout, the model of governance adopted has conformed more to the 'state supervision' model, rather than one of 'state control', where the state provides

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proposals for some mergers between selected universities and technikons, to produce a

"the broad regulatory framework within which the administrations of higher education institutions are expected to produce the results which governments desire" (Cloete, 2002a: p. 89)[2]. As we shall see below, this approach to steering relies significantly on the varying interpretations, and the respective adaptive capacities, of differing institutions to give effect to the policies, with possible implications for diverse and unintended results.

The broad thrust of these policy documents (especially the 1997 White Paper) was underpinned by principles of equity and redress, democratization, effectiveness and efficiency, development, quality, academic freedom, institutional autonomy and public accountability. In particular, the White Paper called for increased and broadened participation, redressing the inequities of the past, and for institutions to become more responsive to societal interests and needs, especially to an increasingly technologically-oriented economy. Amongst other measures, the White Paper provided for:

- A single co-ordinated system of higher education encompassing universities, technikons, colleges and private providers;
- The development of a new goal-oriented performance-related funding system that combines block grants with ear-marked funds;
- The inclusion of higher education programmes in the National Qualifications Framework (NQF), and in a new quality assurance system. (Cloete, 2002a: pp. 100-101)

Significantly for this study, one of the key means by which the state plans to steer the system more effectively towards the goals of economic development, social reconstruction and equity is the academic 'programme'. The White Paper notes that "the most significant conceptual change is that the single co-ordinated system will be premised on a programme-based definition of higher education" (Department of

'comprehensive' institution.

[2] Some interventions by the South African state in recent years resemble a third model, what Moja, Muller & Cloete (1996) have called 'state intervention', where the state has responded to specific management crises or, more recently when the state acted fairly unilaterally to declare the mergers of several higher education institutions in order to restructure the national higher education landscape away from its apartheid-inspired configuration.

Education [DoE] 1997: paragraph 2.4). Programmes would thus become the unit by which the system would be planned, governed and funded, enabling a greater *responsiveness of the system* "to present and future social and economic needs, including labour market trends and opportunities, the new relations between education and work, and in particular, the curricular and methodological changes that flow from the information revolution" (*ibid*: paragraph 2.6). Programmes are thus not only a structural device to enable better steerage of the system; they are intended to be a vehicle for a qualitatively different form of curriculum and, as I shall show below, some interpretations would suggest that they would also involve a modification of how knowledge (or academic discourses) should be ordered and, related to this, the social relations that sustain academic work.

In short, the policy texts were calling for significant adaptations on the part of higher education institutions, and the academic staff that constitute them. Central to this transformation is the notion of 'programmes' as a steering device to enable the state to manage the priorities and quality of institutional output. This device has the effect of requiring the normally inward-looking disciplines and departments to become outwardly responsive to the state, the economy and other constituencies in order to qualify for subsidy funding. The implementation of the programmes-based approach thus has the potential to reflect on the capacity of institutions to respond to such exogenous pressures, and so provides a privileged vantage point from which to examine issues of institutional adaptation.

In order to assess the adaptive challenge presented by programmes, we need to consider the curricular entailments of the policy. The notion of programmes, and the approach to curriculum generally in the policy texts, is informed by several, sometimes contradictory, discourses. Ensor (2002), for example, notes that there are two contradictory discourses at work within the policy texts. These are a 'credit exchange' discourse which promotes flexible modular programmes and the accumulation of credits, and a 'disciplinary' discourse which implies continued support for traditional discipline-based curricula. These two discourses proceed alongside a third discourse which stresses coherence across disciplines, or interdisciplinarity, as I will show in this section. These contending discourses doubtless reflect the bids of differing interest groupings for dominance over the

policy-making processes. These equivocations were never satisfactorily resolved during the policy implementation period (1997-2000), and this enabled the widely varying interpretations of the policy that emerged at institutional level, from strong adherence to traditional models of curriculum at one end of the spectrum, to radical attempts to produce integrated curricula at the other end[3]. The following account of the 'programmes' policy traces what I will call a *discourse of integration* which runs through the policy texts, a set of ideas which, for various reasons, seeks to promote closer lateral relations between disciplinary knowledges in the curriculum, either in pursuit of something called 'coherence' or advocating interdisciplinarity in the curriculum. My interest in this discourse of integration is primarily focused on the implications this might have for social relations between academics, in particular the forms of autonomy they have traditionally enjoyed.

The discourse of integration draws on four sub-discourses, which are arguments about changing forms of knowledge, about responsiveness, about accountability and about outcomes-based approaches to education. I'll show how each of these is reflected in the two key policy texts of the time, particularly in the report of the National Commission on Higher Education (NCHE, 1996a), and, to a lesser extent, the White Paper (DoE, 1997). The first of the sub-discourses underpinning this discourse of integration, and the curriculum reform it proposes, are claims about the *changing nature of knowledge*, and where and how it is produced. The case is often made that science has come to depend more on applied knowledge produced at multiple sites and less on the production of new knowledge:

> The major change is that knowledge is not only generated in its traditional basic and discipline-driven manner in the university, but in new forms in the market and community, and crucially in the interface between higher education and society. ... Knowledge production becomes an increasingly open system in which a number of actors from different disciplines and from outside higher education participate. The value of knowledge is assessed not only on scientific criteria but also on utilitarian and practical grounds. ... Knowledge is increasingly trans-disciplinary and trans-institutional ... (NCHE, 1996a: pp. 125-126)

[3] See Ensor (2002) for her study of the range of responses, based on an examination of the faculty handbooks from South Africa's universities.

This discourse, which stresses the growth of applied knowledge and interdisciplinarity in *knowledge production*, is recruited also as a critique of traditional *curriculum*:

> There is a strong inclination towards closed system disciplinary approaches and programmes that has led to inadequately contextualized teaching and research. The content of the knowledge produced and disseminated is insufficiently responsive to the problems and needs of the African continent, the southern African region, or the vast numbers of poor and rural people in our society. (NCHE, 1996b: p. 2)

This discursive elision[4] works to legitimate the shift away from discipline-based degrees towards more vocationally purposive 'programmes' which, the White Paper notes, "would also break the grip of the traditional pattern of qualification based on sequential, year-long courses in single disciplines." (DoE 1997: para 2.6) This represents a shift of particular significance for the natural sciences and humanities, with their traditional discipline-based majors. A further, and linked, justification for the shift towards programmes is the argument implied in the excerpt above that curricula need to be *responsive* to the needs of society. In the extract below one notes the connection made between a particular notion of educational design and the goal of greater responsiveness to economic and social needs:

> The sequential learning activities leading to the award of particular qualifications can be called programmes. These are almost always invariably trans-, inter- or multidisciplinary.... The demands of the future of South Africa as a developing country require that programmes, while necessarily diverse, should be educationally transformative. Thus they should be planned, coherent and integrated; they should be value adding, building contextually on learners' existing frames of reference; they should be learner-centred, experiential and outcomes-oriented; they should develop attitudes of critical enquiry and powers of analysis; and they should prepare students for continued learning in a world of technological and cultural change". (NCHE, 1996, cited in SAUVCA 1999: p.7)

The logic thus connects the social purpose of South Africa as a "developing country" with a need for programmes that are "educationally transformative", and holds that the characteristics of such programmes include the fact that they are "planned, coherent and integrated". A third justification for the emphasis on programmes draws

on the discourse of *accountability*, which the NCHE report embeds in the rhetoric of 'responsiveness', heralding increased levels of managerial control:

> It can be described as a shift from a closed to a more open and interactive higher education system, responding to social, cultural, political and economic changes in its environment. ... There will also be greater social accountability towards the taxpayer and the client/consumer regarding the cost-effectiveness, quality and relevance of teaching and research programmes. In essence, increased responsiveness and accountability express the greater impact of the market and civil society on higher education and the consequent need for appropriate forms of regulation. ... Overall, greater responsiveness will require new forms of management and assessment of knowledge production and dissemination. It has implications for the content, form and delivery of the curriculum. (NCHE 1996b: pp. 6 – 7).

The NCHE report is explicit that one of the consequences of 'responsiveness' for academic disciplines is a weakening of the autonomy of disciplines, and a shift of regulative authority toward more negotiated forms:

> At an epistemological level, increased responsiveness entails a shift from closed knowledge systems (controlled and driven by canonical norms of traditional disciplines and by collegially recognised authority) to more open knowledge systems (in dynamic interaction with external social interests, consumer of client demand, and other processes of knowledge generation). (NCHE 1996b: p. 6)

The subsequent regulations governing academic programmes were issued by the South African Qualifications Authority (SAQA), a statutory body charged with the development of a National Qualifications Framework, and the chief advocate in South Africa of outcomes-based approaches to education[5]. SAQA is one of the main sponsors of a fourth discourse, that of *outcomes-based approaches*. The regulations require a qualification to (amongst other things):

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[4] See Kraak (2000) and Muller (2000) for a discussion of the problematic application of arguments about changing forms of knowledge production to the structure and content of curriculum.

[5] Muller & Ogude (2002) document how the elaborate vocabulary and bureaucracy spawned by SAQA is greeted mostly with deep misgivings in the academic community. An exception is the strategy of 'constructive engagement' adopted by a constituency within the South African Vice Chancellors' Association (SAUVCA), a strategy which had the dual effect of softening for the higher education sector some of SAQA's more onerous requirements and of making SAUVCA (or at least one constituency within SAUVCA) a tentative advocate of outcomes-based approaches to education (OBE) and the NQF, the latter effect being a turn-around on an earlier oppositional position.

> represent a planned combination of learning outcomes which has a defined purpose or purposes, and which is intended to provide qualifying learners with applied competence and a basis for further learning;

and to

> incorporate integrated assessment appropriately to ensure that the purpose of the qualification is achieved, and that such assessment shall use a range of formative and summative assessment methods such as portfolios, simulations, workplace assessments, written and oral communication. (SAQA, 1999, cited in SAUVCA 1999: pp. 19-20)

The ideas of "defined purpose", "planned combinations", "applied competence" and "integrated assessment" are "to ensure that the purpose of the qualification is achieved". Even the body representing the university sector (the South African Universities' Vice Chancellors' Association – SAUVCA) endorses the discourse, and notes that the programmatization process would make it "feasible for massive improvements in quality to be achieved" through "putting into place the most important requirement of any quality assurance system: clearly defined outcomes against which the quality of student performance and institutional provision can be assessed" (SAUVCA 1999: p. 26). Thus SAUVCA sees the advantages of programmatization lying in its potential for increasing levels of accountability and (by implication) centralisation of control.

Significantly, SAUVCA published a Facilitatory Handbook (SAUVCA 1999) intended to guide the implementation of the policy in South Africa's universities. The handbook is explicit about the implications of the policy for weakening the autonomy not just of the disciplines, but of individual academics as well: what is required is nothing less than

> a new model of Higher Education practice. For example, academics will now have to make explicit their learning outcomes and assessment criteria and offer these for public scrutiny. When designing curricula, they will be required to work in programme teams rather than as single individuals .... The demand for summative integrated assessment, across specific course outcomes and across modules within a programme will be particularly demanding in relation to design and implementation, given traditional territorial and individualistic approaches to teaching .... (SAUVCA 1999: pp. 27-8)

The policy of programmatization was thus anticipating significant shifts in the nature of academic practices, in the professional identities of academics, and in the forms of authority that are invoked to regulate curriculum decisions. In particular, it anticipates a weakening of the insulations between disciplines, and it suggests that academics will participate in new forms of social organization, programme-based collectives which cross disciplinary boundaries. It expects that academics within these new collectives will relinquish a measure of autonomy to a process of collegial democracy and mutual surveillance, in order to produce curricula which serve external accountabilities. These accountabilities are twofold: firstly a responsiveness to broader social and economic goals, and secondly an accountability for achieving the cross-cutting learning goals stipulated for academic programmes as a whole (rather than simply discipline-specific ones). Both of these accountabilities ask for a weakening of prior insulations between departments or disciplines as academics meet in programme teams to agree on graduate identities deemed suitable for the contemporary workplace, translate these into overarching outcomes that curricula should achieve, and then (at least) modify disciplinary curricula or (preferably, it seems) collaborate in multi-disciplinary curricula to achieve these outcomes. In short, the policy proposes the emergence of a new organizational form, interdisciplinary programme teams, to which academics should show allegiance for the purposes of teaching. In this way, the policy of programmatization, especially its discourse of integration, represents a significant adaptive challenge for institutions, requiring as it does a modification of the relationships between traditionally insulated disciplinary discourses, and concomitantly changed social relations between academics.

Not surprisingly, the policy is seen by many in the system as an unprecedented encroachment on the autonomy of academics and disciplines, especially in the humanities and natural sciences which have hitherto enjoyed relatively high levels of autonomy compared to the professional faculties which, in South Africa, have long been accountable to professional bodies. In the next section, I review the literature on the implementation of the programmes policy in South Africa.

1.3 Academics' responses to the curriculum restructuring policy

Given the upheaval occasioned by this policy across many of South Africa's universities, the empirical literature on the impact of the policy is relatively limited, and I shall briefly extract from this body only that which is directly relevant to the study at hand, and its concern with how academics have responded to a policy which threatens to diminish traditional levels of autonomy.

In her study of how higher education institutions were implementing the programmes policy, Ogude (2001) emphasizes the widespread perceptions in institutions that the policy lacked clarity:

> One of the major frustrations, even for the most ardent supporters of the current policy changes, was the lack of clear policy guidelines from SAQA, DoE and the CHE. The process of programme planning was occurring in a policy vacuum in many key areas. Policy in areas such as funding and the size and shape (of the higher education system) was lagging behind the programmes development process yet it was key to major decisions on programmes. (Ogude, 2001: p. 76)

In spite of this however, and in spite of the multiple (and sometimes contradictory) discursive threads running through the policy, Ogude confirms important broad similarities of interpretation across institutions, including the instrumental emphasis on 'employability' and 'market forces' as a rationale for designing programmes, and a strong emphasis on interdisciplinarity (*ibid*: p. 65). Significantly, she notes widespread perceptions that not only was the policy seen as a threat to autonomy, but the mechanisms of the policy were under-defined:

> The responses of academics were similar and could largely be characterized as that of disillusionment and uncertainty. The uncertainty, however, existed at two levels. In the first group the uncertainty was mainly perceived as a threat to academic freedom while in the latter group, in addition to uncertainty relating to academic freedom, there was disillusionment and confusion relating to the inability of the management to provide clear policy guidelines... (*ibid*: p. 66)

It is not surprising, therefore, that in the absence of clear policy guidelines the well-established discipline-based frames of reference from the past persisted in spite of the rhetoric of reform projected by institutions. Ensor's (2002) study concludes:

> In general, curricula in the sciences and humanities have altered in some respects, but remain fundamentally discipline-based. Knowledge has been re-organized and repackaged, but there are no significant shifts towards what Bernstein might call an integrated curriculum. (Ensor, 2002: p. 291)

Thus, in spite of the great upheaval prompted by the restructuring, it seems as if disciplines remain the primary reference points for curriculum, suggesting that autonomies may not have been weakened as much as some authors of the policy might have hoped. However, neither of the two studies mentioned above have included a qualitative exploration of the social processes of curriculum restructuring, and so it remains unclear how autonomy was negotiated and defended in these processes, and the extent to which new organizational forms have emerged and prospered.

Other more qualitative studies, however, have illustrated how allegiance to disciplines has continued to inform the responses of academics, in spite of attempts by the policy to weaken these relationships. The work of Gibbon, Habib, Jansen & Parekh (2001) on the restructuring activities at the University of Durban Westville (UDW) demonstrates how the reforms presented challenges to traditional academic identities which were resisted, not only by academics in the Arts and Social Sciences, but those in the Engineering Faculty as well, all of whom contested the more instrumental identities that were proposed for them in the course of the reform. "Many of the academics", comment Gibbon, *et al*, "were simply not prepared or trained to confront these new demands" (*ibid*: p. 42. See also Jansen, 2000). Complicating the reforms at UDW was a crisis of leadership, where (according to Jansen, Habib, Gibbon and Parekh, 2001) the crucial management capacity needed to implement the reforms was disbanded at a critical juncture of implementation. Although the planning process for the restructuring had been widely acclaimed as constructive and inclusive at every level, it seems that the Vice Chancellor dissolved the management team just as implementation began, resulting, it seems, in weakened management capacity at the

middle levels. The consequence, say Jansen, *et al*, was that "the restructuring plan fell apart" and the institution became "caught in turmoil" that enveloped students, academic staff and even members of council (*ibid*: p. 37), weakening the position of the institution in the higher education field.

Equally drastic changes were undertaken at the Univeristy of Natal at Pietermaritzberg (UNP), but seem to have been somewhat better managed. The programmatization process at UNP involved dissolving academic departments into 'schools', but as Mathieson (2001) reports, "the way academics in the humanities are experiencing the new programmes policy is challenging their identities at a fundamental level, and their responses to the new policy are part of a defensive strategy to renegotiate the terms on which programmes will be implemented" (*ibid*: p. 22). In this context, academics interpreted the policy in ways that defended fundamental disciplinary principles:

> Thus, while much of the pressure of programmes is towards interdisciplinary and applied rather than a disciplinary focus, in [a school in the Humanities Faculty] they insisted that any new programmes should involve a "deepening rather than a shallowing of (the disciplinary focus of) the BA". (*ibid*: p. 21)

Mathieson concludes that, in her view, the stresses on academic identities arise from the fact that societal demands and changing student interests are moving in a direction that is not readily reconcilable with the changes taking place within disciplines, and that pressures for wholesale changes may have the effect of pushing "academics into retreat from genuine engagement with national and institutional policy" (*ibid*: pp. 30-31).

The University of Port Elizabeth, seeking to move away from its pro-apartheid history and solve persistent financial concerns, also collapsed discipline-based departments into 'schools' during its programmatization process, with the most radical changes taking place in an Arts Faculty under considerable pressure from a new costing model that 'revealed' the Faculty to be deeply 'in arrears' (Blunt & Cunningham, 2002: p. 131). The new vocationally designed programmes, however, seemed to find little favour with the student market and enrolments in the faculty "declined steadily" until

the Faculty re-introduced the general BA programme in 2002, when enrolments began to improve again (*ibid*: pp. 134–135). But the insecurity of the new environment of "excessive competitiveness", financial concerns, and falling student numbers has driven some academics to respond in pragmatic and insular ways: "Threatened with the possibility of retrenchment, lecturers paid more attention to the security of their own expertise rather than to the design of programmes that would develop the valued abilities of critical thinking and coherent communication" (*ibid*: p. 136). The consequence, say Cunningham and Blunt, of the influence of instrumental motivations appears to be the drift of more successful programmes towards other faculties, and the decline of the liberal arts which, they argue, threatens UPE's "fragile status as a university".

In another of her studies, Ensor (1998) provides what is probably one of the best analyses of the strong resistances and conflicts that could characterize attempts to weaken disciplinary boundaries and destabilize academic identities. She develops an analysis of a controversy[6] that erupted in one South African university in the throes of implementing the programmatization of curricula. At the University of Cape Town, the Faculty of Social Science and Humanities attempted to develop an interdisciplinary Foundation Semester which involved a focus on Africa as its central binding theme. In the process, a team of academics from various departments who had committed themselves to producing the new curriculum by means of a democratic collegial process came into conflict with another, late-entering, member of the team, the most senior figure in African Studies at the institution, Professor Mahmood Mamdani. At issue was the form of authority that should be invoked to justify curricular decisions: the collegial democracy of an interdisciplinary team or the professorial authority of the established and appointed expert in the field? On the one hand Mamdani defended the authority and autonomy of professorial specialist expertise, validated by the international epistemic community, while on the other hand this claim was derided as "anachronistic", depending on "an authority that is hegemonic and inappropriate" (Hall, 1998: p. 54), and in its place invoked 'progressive' pedagogies, aimed at promoting equity, as the legitimate alternative.

[6] For a fuller account of the affair, including Ensor's paper, and the papers written by several of the individuals involved in the dispute, see the special edition of *Social Dynamics*, Summer 1998, Vol 24/2.

The consequence was a damaging dispute, waged increasingly publicly, which polarized staff and undermined student confidence in the Foundation Semester curriculum. Although Professor Mamdani resigned from the university shortly afterwards, the debates raised by the affair remained unresolved:

> And so we were left with a great deal of sound and fury in the polemical exchanges, but no real progress on the vital issue of developing either clear conceptions or appropriate practices of academic authority and accountability in the curricular design of interdisciplinary programmes. (Du Toit, 2000: p. 128)

The Mamdani affair, and the policies that prompted it, brought the issue of academic autonomy to the fore. In the literature that emerged at the time, two broad positions emerge: on the one hand there are those who suggest that academic freedom is a conceptually stable notion, to be defended against external encroachment at all costs; on the other hand there are those who see the notion as necessarily contextual and open to modification. The 'defenders' typically point to the threats to academic freedom emerging from external sources, usually the state:

> In reality there is a significant – and deeply disappointing – continuity between the restrictive definitions of academic freedom offered in both pre- and post-apartheid society. Conceptually, this impoverished definition of academic freedom is incommensurate with the task of the university in achieving a critical and participatory democracy, and, in practice, it has allowed the higher education system to be increasingly defined around a highly restrictive neo-liberal agenda. (Higgins, 2000: p. 101)

In the face of such instrumental threats, Higgins concludes, resistance is the appropriate response from academics:

> When current government policy is so explicitly devoted to vocational and technical education, it is time for South African academics to argue against the received ideas of academic freedom and to reaffirm the need for the measure of institutional autonomy necessary to the institutional practice of academic freedom. (*ibid*: p. 119)

By contrast, the 'modifiers' appeal to contextual factors to support a re-definition of, or a limitation on, the notion of academic freedom. A particularly common instance in the South African context is to suggest that the university's relationship with broader

society brings inevitable entailments, and that issues of (for example) equity, or of social development, require that the university be accountable to external constituencies for how public funds are used (see for example Coovadia, 1986, and Ramphele, 1999). But one sub-variant of the 'modifiers' category looks not outside the academy for the defining context, but rather to developments within the academy itself. Du Toit (2000), for example, identifies the growth of managerialism within institutions (a development that has occurred independent of state initiatives in many cases, he argues), and the weakening of disciplinary curricula in the face of changing approaches to departmental management and modularization, as being key threats to the integrity of the academic enterprise. These conditions require a re-assessment of the notion of academic freedom, and he suggests that the source of the threat may in fact be from the enemy *within*:

> The key issue for the current practice of academic freedom is how to define and strengthen internal accountability, bearing in mind the growing pressures for forms of external accountability. In this regard apathy and indifference probably constitute the greatest threat. This is not to say that down the line external interference and state policy may not once again become major threats to academic freedom. But for the time being the priority must be to bring our own intellectual house in order and to clarify what academic freedom and accountability requires in the current circumstances... (Du Toit, 2000: p. 129)

What emerges from these debates is a more complex picture than a dichotomous story about intellectual stalwarts defending the ramparts of the academy against the enemy without. Instead we glimpse a complex series of issues *within* the university which go to the heart of the purposes and motivations which structure academic practices. The concept of the university, and the academic identities it sustains, is not a unitary one (as Castells, 2001, has reminded us), and exogenous pressures from state restructuring policies often act to throw normally tacit, tolerated divisions within the university into visible relief, and may open spaces for important redefinitions of identity, practice and organization. This study thus seeks to explore responses of academics in the South African higher education context, and the frames of reference which condition these responses, in circumstances which threaten traditional autonomies and thus the traditional frames of reference which structure practices. As I have noted earlier, my interest is less in those who resist change, as this is now increasingly well-documented, and is more focused instead on those who see opportunities in the

To develop this understanding of adaptive capacity, the study examines the implementation of the curriculum restructuring policy at two South African universities, seeking out case studies of exceptional instances where the restructuring initiative was embraced to one extent or another by some academics, in contrast to the widespread resistance or evasions by other academics which characterized responses at these and other institutions (Ensor, 2002). The study draws on the theoretical frame of identity as a means to map the varying dispositions and perceptions of academics associated with this compliance with the policy, as well as the context and conditions under which these academics attempted to exercise their dispositions. The primary source of data will be the accounts that academics give of themselves and their participation in the reform.

The general question motivating this study is as follows:

> How do academics account for their compliance with policies which appear to diminish their autonomy, and which many of their colleagues resist or evade?

This general question may be elaborated into the following sub-questions:

1. In what ways has the curriculum restructuring policy been seen by academics as an opportunity for adaptive practices?
2. What role (if any) do the characteristics of disciplines play in shaping the responses of apparently compliant academics?
3. Have new organizational forms (in the shape of programme teams) emerged, and if so how coherent and sustainable do these appear to be?
4. What conditions work to support or frustrate such compliance initiatives?

Chapter Two reviews the international literature on organizational adaptation in higher education, in particular neo-institutional theories which extend the insights afforded by resource-dependency theories by focusing on the normative dimensions of institutional adaptive behaviour. Neo-institutional theories suggest that the value and belief systems which circulate in the academy are central in conditioning the practices of (and the social relations between) academics, and thus impact directly on the adaptive capacities of institutions. These norms and sets of social relations which

underpin academic organization play a major role in constituting academic identities, and reform initiatives attempt to steer these identities and practices in one direction or another. The dispositions and motivations of academics are thus key to understanding their responses to exogenous change initiatives. I then review the literature on culture and identity in higher education, looking in particular at debates about the major social institutions responsible for conditioning the professional dispositions of academics, and the collective capacity of the academic profession to resist or subvert those pressures for change which are at odds with the established value systems of the academy. This capacity is confirmed in several major studies which examine the response of academics to systemic policy shifts. I show in this chapter that the phenomenon of compliance is under-represented in the literature, as are studies of cross-boundary collaborations for the purposes of curriculum.

Chapter Three presents the analytic framework that I will use in this study to examine how the normative dispositions and social relations of the academy are implicated in curricular practices, and how changes in the latter has implications for the former. Attempts to move from a discipline-based (what Bernstein calls a collection code) model of curriculum to an interdisciplinary (or integrated code) curriculum represents a shift in the traditional division of academic labour and has consequences for the location of authority, and the forms of solidarity and allegiance that characterize academic social relations. To provide a conceptual frame for the study, I begin by drawing on Mary Douglas' typology of 'ways of life' and I adapt Maassen's use of this typology as a means to identify possible shifts in the dispositions of academics under conditions of policy-driven reforms. I then make use of Bernstein's typology of pedagogic identities to clarify the new identity positions suggested by the policies. The study thus sets out to identify possible shifts from traditional retrospective, elite identities (what I have called 'disciplinary' identities) towards positions which Bernstein has characterised as 'market' or 'therapeutic' identities, positions which, in different ways, result in a modification of the traditional autonomy of academics. I have adapted these terms for the purposes of this study, preferring to distinguish between dispositions which could be characterized as 'insular' or 'connective', so as to open up a wider possible array of variants, underpinned by differing value systems.

Chapter Four discusses the design and methodology of the study. I review the rationale for the selection of institutional contexts, and the procedure for selecting the case studies for the project, and I discuss my approach to (and the problems with) analyzing what is predominantly interview data, assessing its affordances and limitations.

Chapter Five presents an overview of the two institutions under study, outlining why they were chosen, the ways in which they are similar (both are elite institutions with well-established disciplinary cultures, and thus likely to be less amenable to the changes suggested in the policy) and ways in which they differ (each has a distinct history and institutional culture which has potential implications for the relative receptiveness of the respective institutional communities towards the reforms). The chapter also sketches the differing approaches to policy implementation undertaken in the respective institutions.

Chapters Six to Nine present the various case studies undertaken for this project, each case study representing an instance where claims have been made for substantive compliance in one way or another with the programmes policy. Each chapter presents a pair of linked programme case studies, one each from the respective institutions under study. Each case study examines the varying identity configurations of participants and their respective motivations, the dynamics involved in establishing and sustaining the programme groupings, as well as a tentative evaluation in each case of the likely stability or sustainability of the new organizational form.

Chapter Ten concludes the study by presenting an overview of the varying identity dispositions that have been identified, looks at conditions under which adaptation is likely to succeed, and the implications of these findings for the assumptions underlying the policy provisions and the nature of adaptive capacity in institutions. The chapter concludes with a discussion of the limitations of this study, and proposes further avenues for related study.

CHAPTER TWO: CHANGE, CULTURE AND IDENTITY IN HIGHER EDUCATION

> All major social entities have a symbolic side, a culture as well as a social structure, some shared accounts and common beliefs that define for the participants who they are, what they are doing, why they are doing it, and whether they have been blessed or cursed. (Clark, 1983a: p. 72)

2.1 Introduction

This study aims to explore the responses to the programmes policy, focusing at the level of the 'understructure', rather than the systemic or institutional level (Amaral, *et al.*, 2002). The understructure is where "the 'real work' of higher education takes place in the classrooms, libraries and laboratories", and the issue is the impact of system-level and institutional-level reforms on "the basic discipline unit" (*ibid*: p. 289). In other words, it explores the responses of academics 'on the ground' to the injunctions of the curriculum restructuring policy, with a particular interest in those who appear to comply with the policy, even though, at first sight, compliance appears to run counter the established interests of the academics themselves.

In the previous chapter, I reviewed the policy context for this study pointing to how it suggests a conscious departure from traditional academic practices in ways that would render academics accountable to constituencies other than their disciplinary communities. In particular, the policy proposes a shift in the traditional division of academic labour, suggesting that academics collaborate in cross-disciplinary teams to produce and deliver undergraduate curricula, a development that would subordinate traditional autonomies to external and instrumental purposes.

In this chapter, I review the literature on institutional adaptation in higher education, and on the role that culture and identity play in these processes. I start by looking at broader theories of organizational change that have been used recently to give accounts of the responses of higher education institutions to changes in the environment, including resource-dependency theory and in particular at neo-

institutional theory, with its emphasis on the cultural and normative dimensions of institutional adaptive behaviour. I make the case for the value of understanding the normative dimensions shaping responses to pressures for change at the level of the individual academic and the basic operational units of institutions. The chapter continues by laying out various accounts of the ways in which core values and practices are structured in higher education, drawing on the considerable work of Burton Clark, Tony Becher, Mary Douglas and others. I then review recent empirical studies which explore academic cultures and identities, acknowledging in particular work by Paul Trowler, Mary Henkel and Peter Maassen. These studies explore the responses of academics to pressures for change, and document the characteristic resistances in the system to exogenous adaptive pressures. I then draw on the work of educational sociologist Basil Bernstein who has developed a conceptual language of description for pedagogy, including ways of analysing curriculum, and the identities and social relations associated with differing modes of curriculum. I then review the South African literature on the programmes policy, before concluding the chapter by locating the study at hand in relation to this literature. I conclude by identifying the particular focus of interest for this study, and the contribution it may be expected to make to the literature on adaptation in higher education.

2.2 Theories of Institutional Change

Contemporary approaches to understanding how higher education institutions respond to policy (or to other environmental pressures, like changes in the global context, or in the 'market') are often presented as reactions against 'determinist' models that proffer linear, cause-and-effect accounts of change which overestimate the effect of environmental pressures and underestimate the complexity and unpredictability of these institutions and their change processes. Instead, as we confront the structure-agency dilemma, contemporary theory seeks to understand the complex interplay between, on the one hand, the range of action choices that institutional actors perceive as available to them and, on the other hand, the structural constraints that may obtain in these contexts. Explanatory accounts thus seek to understand the degree of play and contestation at work in change processes which give rise to their varied and unpredictable outcomes (Reed, *et al*, 2002: p. xvii).

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Writers in this field are usually unanimous that the vexed issue of organizational change in higher education is linked to the distinctive characteristics of the institution of the university. In his review of the literature on this issue, Van Vught (1991) argues that these characteristics begin with the primary function of the handling of knowledge – its discovery, conservation, refinement, transmission and application. Proceeding from this is the distinctive authority and autonomy that academics derive from their mastery of their specialisms. It is this prized autonomy that led Mintzberg (1979) to characterize such institutions as 'professional bureaucracies'. The salience of knowledge, and the inherent or historical forms that such knowledges take, have led to knowledge areas becoming the building blocks of higher education institutions, formalised into subject departments, necessarily so, in Van Vught's view: "Without some institutionalization of these knowledge areas a higher education organization cannot exist" (Van Vught, 1991: p. 23). But this form of organisation, built on discreet specialisms, inevitably results in abundant fragmentation, with the autonomous units that, before now, have required little operational linkage (Clark, 1983b: p. 21). The combination of autonomous specialisms, and the accompanying fragmentation, gives rise to "extreme diffusion of decision-making power" (Van Vught, 1991: p. 24) likened to a federal system where:

> Semi-autonomous departments and schools, chairs and faculties act like small sovereign states as they pursue distinctive self-interests and stand over against the authority of the whole. (Clark, 1983a: pp. 266-7)

A consequence of this is the "very limited capacity" of institutional administrators to steer organisations in concerted directions. Although universities are, by their nature, sites of widespread and diverse innovation, this innovation is a grassroots phenomenon, and diffusion of innovation in concerted, managed ways does not happen easily. Instead, such diffusion of innovation will only take place when faculty members judge them to be worthwhile. As a consequence, Clark points out, change in higher education institutions tends to consist of incremental adjustments, building up over time to larger flows of change.

This complexity of institutions, their fragmented structure which focuses inwardly on the values which sustain disciplinarity, and the distributed nature of authority and

autonomy together constitute the lack of amenability that such institutions have to managed change. Furthermore, when the state proposes highly complex and wide-ranging policy reforms (like the curriculum restructuring outlined in the previous chapter), it seems that the likelihood of their being taken on is slim:

> When complexity is defined as the combination of the degree to which an innovation is a departure from existing values and practices with a number of functional areas aimed at by the innovation, the level of complexity of an innovation process in higher education may be expected to be negatively related to the rate of adoption of the innovation. The more complex an innovation, the less successful that innovation will be in getting adopted. (Van Vught, 1991: p. 34)

Working on this understanding of the characteristics of institutions, Maassen and Gornitzka (1999) have identified two broad theories of change; these are resource dependency theory, and neo-institutional theory. Resource dependency theory suggests that when environmental changes threaten the flow of resources critical to an institution's survival, the institution will adapt to ensure the continuity of the resource flows. Maassen and Gornitzka argue that what sets this theory apart from simple 'environmental determinism' is its emphasis on the relative power of the players: the greater the power of the state or other external stakeholders, the greater their effect on the institutions; conversely, the greater the power of the institution, the wider the choices open to it. In this view, the responses of organizations are "not automatic and passive, but active and volitional" (*ibid*: p. 297), and may be informed by an understanding of the interdependencies between actors in the policy field, or by a need to adjudicate between competing demands from various stakeholders. Further, and very importantly, the theory allows for intra-organizational dynamics, where contestations within institutions can influence the interpretation and outcome of environmental pressures. As Cloete and Maassen note, this means that:

> Organizational change cannot be understood simply by investigating objective resource dependencies and inter-dependencies. It is also necessary to understand the way organizations perceive their environments, how they act to control and avoid dependencies, the role of leadership and the way in which distribution of internal power affects, and is affected by, external dependencies and organizational independence. (Cloete and Maassen, 2002: p. 466)

Neo-institutional theory, say Maassen and Gornitzka, shares this concern with resources, but adds to the complexity of the account by focusing also on the value-systems and beliefs within institutions, which may condition the responses of institutions to environmental pressures. For change to occur, it has either to be consistent with the established interests and normative patterns of the institutions, or the new dispensation needs to be securely embedded within the institution's organizational framework. Organizations are unlikely to respond easily to pressures for change which go against fundamental values which structure practices and identities in that context. Indeed, in such situations, says Scharpf (1987/8) institutions are able to "ignore control signals, to forego incentives, and to absorb sanctions, without changing their ways in the direction desired by government policy makers" (Scharpf, 1987/8: p. 105, quoted in Muller, 2001: p. 11).

Muller (2001) has taken this view further, and he suggests that institutions can be unresponsive to policy as a result of *either* their weakness *or* their strength in the disposition of what he calls 'intellectual capital' and 'managerial capital'. In other words a lack of responsiveness may derive from an institution's sense of security in its own strengths, or conversely an institution may be unresponsive because it lacks the resources to mobilise in the direction suggested by the policy. Equally, Muller continues, institutions can be *responsive* from either weakness or strength. An institution may respond significantly because it sees the adaptation as in its interests, and has the capacity to bring the adaptation about; conversely, an institution may respond because it senses its own weaknesses, and desires to re-position itself advantageously (Muller, 2001: pp. 12-13).

I follow Maassen and Gornitzka (1999) in seeing these two broad theoretical frames as compatible and complementary, and this study is conducted in the spirit of their injunction that an understanding of organisational responses requires an exploration of the "micro-foundations" of the internal dynamics within institutions, where institutions are not understood as single unified entities:

> Understanding the internal processes can be of vital importance for understanding why and how universities and colleges change, and how and why policies fail or are implemented successfully. (*ibid*: p. 303)

An understanding of these internal processes, and the normative match which may or may not occur between internal value systems and external pressures for change, requires an examination at the level at which institutional performances are carried out – the basic operational units which effect educational delivery, and the individual academics who constitute these. In other words, this study focuses on the 'understructure' of the system (Clark, 1983a), especially on the new organizational forms (programme teams) emerging in response to the programmes policy. The interest is in the internal normative systems of these new institutional sub-units, which could reflect ways in which traditional academic identities may (or may not) be changing. In the following section, I review the literature on academic identities and cultures, and the relation these have to the issue of institutional adaptation.

2.3 Culture and Identity in Higher Education

> [Identity is] not an essence but a positioning. Hence there is always a politics of position. ... Identity should be seen as a "production" which is never complete, always in process, and always constituted within, not outside, representation. (Hall, 1990: 226, 222. Cited in Trowler, 1998: 82)

2.3.1 A Theory of Culture

In his extensive review of the wide literature on organizational culture, Maassen (1996) notes that there is a "fundamental lack of agreement" on how the notion should be interpreted, with little "common theoretical ground" underpinning the literature. It is not my intention to rehearse here the divergent literature in this field (apart from Maassen's account, a cogent overview is to be found in Alvesson and Berg, 1992), but rather my purpose is to position this study in relation to a particular body of work in this regard. I have followed the various authors whose work I review in this chapter in adopting a broadly interpretivist notion of culture, which balances the agency of the individual against the conditioning effects of social structures. This interpretivist view proposes that organizations are products of culture, that they are themselves cultural artefacts. Some have suggested that this view stands in contrast to another approach to understanding culture, a functionalist approach which tends to see culture as an independent attribute of organizations, something which can be managed and steered,

like an independent resource, to achieve particular goals. (see Maassen's 1996 summary of the debate: pp. 18-20).

The interpretivist view of culture accords an active role to individuals as they negotiate the accumulated resources of meaning that are made available in social contexts. In Mary Douglas's account, social contexts have "permitting and constraining effects upon the individual's choices":

> It consists of social action, a deposit from myriads of individual decisions made in the past.... We will pick from the coral-reef accumulation of past decisions only those which landscape the individual's new choices: the action is this afternoon, the context was made afresh this morning, but some of its effects are long slow fibres reaching from years back. With such a view of the social environment we can try to make allowances for the individual's part in transforming it, minute to minute. (Douglas, 1982a: p. 190)

But the fact that social contexts are shared across groupings gives rise to regularities of values and beliefs, what Mary Douglas calls "cultural bias":

> Anything whatsoever that is perceived at all must pass by perceptual controls. In the sifting process something is admitted, something rejected and something supplemented to make the event cognizable. The process is largely cultural. A cultural bias puts moral problems under a particular light. Once shaped, the individual choices come catalogued according to the structuring of consciousness, which is far from being a private affair. (Douglas, 1982b: p. 1)

Following Douglas, Thompson *et al* (1990) explain that shared cultural biases involve particular sets of social relations: the way an individual perceives physical or human nature justifies particular forms of behaviour and thus particular relations with others. "Shared values and beliefs are thus not free to come together any which way; they are always closely tied to the social relations they help legitimate" (*ibid*: p. 2). A viable combination of cultural bias and social relations constitute a "way of life" (*ibid*: p. 1). Drawing on an understanding of the rules, or forms of regulation, embedded in cultural biases, and the allegiance to groupings that are constituted by social relations, Douglas has proposed a typology of four 'ways of life' that serves as an analytic tool for describing people and their relation to culture; this is a means of "finding an array of beliefs locked together into relational patterns" (Douglas, 1982a: p. 199). This four-

part typology is constructed in quadrants formed against two axes; one axis ('group') represents the strength of allegiance that an individual owes to a group or the extent of dependency on that group (varying from strong to weak), while the other axis ('grid') represents the extent to which an individual is subject to regulation, whether within or without membership of a group (varying from maximum regulation to maximum freedom). (see figure 3.1)

Strength of Group **Degree of regulation**	**Strong**	**Weak**
Strong	Hierarchy	Fatalism
Weak	Egalitarianism	Individualism

Figure 3.1: Mary Douglas' four types of social culture (adapted from Maassen, 1996: p. 30)

The 'hierarchy' quadrant is typified in the environment of large institutions where loyalty is rewarded and hierarchy respected; individuals know their respective places in a context which is securely insulated and stratified. Strongly contrasted are the 'individualists' who, with high mobility, are able to negotiate contracts or choose allies, with wider possibilities to negotiate or achieve prestige and influence. 'Fatalists' are individuals whose behaviour is closely regulated, but who are not afforded the protection and privileges of strong solidarity. Finally the 'egalitarian' quadrant allows for group membership based on a principle of individual equality, but where the social rules and statuses are ambiguous and open to negotiation.

What the theory suggests, says Douglas, is that "the number of cultural packages among which people can choose when they settle for any particular kind of social environment is limited" (Douglas, 1982b: p. 7). Significantly for the study at hand, she argues that

> It is not possible to stay in two parts of the diagram at once, and that the moral justifications which people give for what they want to do are the

> hard edges of social change. If they wish for change, they will adopt different justifications, if they wish for continuity they will call upon those principles which uphold the present order. (*ibid*: p. 4)

It is a goal of this study to examine the justifications advanced by people (academics in this case) who appear to be opting for changed positions relative to their traditional locations, with potentially changed sets of social relations supported by changed regulative dispositions. The trend of the discourses circulating in the policy texts under consideration in this study, I suggest, advocates a movement of academics away from strong traditional positions within the 'hierarchy' quadrant, towards either the 'egalitarian' quadrant (with the emphasis on teamwork) or the 'individualist' quadrant (with the emphasis on entrepreneurial flexibility to respond to opportunities in the environment). It is necessary, at this point, to consider how academic identities and ways of life have been theorised in the literature so far. I therefore now introduce a review of key writers who have theorised academic cultures and identities, and who have examined the patterns of responses from academics to pressures for change. In the following chapter, I will return to Mary Douglas' work to show how it provides a generic frame for this study, and I will show how this frame is further developed by Basil Bernstein for educational contexts, and how I have adapted this for academic settings.

2.3.2 Culture and Identity in Higher Education

The classic accounts of how the values and dispositions of academics are conditioned are by Clark (1983a; 1987) and Becher (1989). Clark has argued (and many writers have followed him in this, including Austin, 1992; Maassen, 1996; Henkel, 2000) that the four principle social institutions responsible for conditioning the professional identities of academics are the discipline into which they are socialized, the institution or enterprise in which they are located, the national higher education system, and the academic profession more broadly. Both Clark and Becher argue that of these four social institutions, the primary source of academic enculturation is to be found in the knowledge structures of academic disciplines:

> For higher education, we have seen, the tasks are knowledge-centred. It is around the formidable array of specific subjects and their self-generating and autonomous tendencies that higher education becomes something unique, to be first understood in its own terms. ... Field by field, the academic search for progress leads to alternative interpretations of the world. Uncertainty rather than the grail of truth characterizes the frontiers of knowledge, and mortals can offer only different and changing approximations of the truth. Knowledge will remain a divided and imperfect substance. In its fissions and faults we come closest to a root cause of the many odd ways of the higher education system. (Clark, 1983a: p. 276)

These cognitive divisions, and their interpretive diversity, give rise to differing orientations to the world, and a normative diversity within the profession. These cognitive orientations shape the varying cultures of the disciplines and the dispositions of individual academics:

> As knowledge is newly created by research, and is reformulated and repeatedly transmitted in teaching and service, its force continuously bubbles up from within daily operations, right in the palm of the professional hand. The logic, the identity, the very rationality of the academic profession is thereby rooted in the evolving organization of those categories of knowledge that disciplines and professional fields of study have established historically and carried to the present, producing an inertia that powerfully prefigures the future. (Clark, 1987: p. 268)

In this way, the differing epistemological concerns of disciplines play a profound role in shaping the consciousness and priorities of individual academics, as well as the cultures of discipline-based groupings. Recruits to the academy "enter different cultural houses, there to share beliefs about theory, methodology, techniques and problems" (Clark, 1983a: p. 76), and over time individuals may develop "self-identities that may be more powerful than those of mate, lover, and family protector, or those that come from community, political party, church, and fraternal order" (*ibid*: p. 80). Austin (1992) has reminded us that the conditioning effects of this socialization are of course not even and homogenous across all the members of a disciplinary community, and that it is unlikely that members of a discipline experience their work and careers in the same way" (Austin, 1992: p. 1617). Although there are certain to be wide contextual differences, and considerable variance in how individuals take on the disciplinary cultures, there are nevertheless discernable regularities, as Becher has shown in his (1989) study.

But Clark also points to various internal dynamics which lead to fragmentation, and differentiation of identities, within groupings, as well as tensions that arise because of the cognitively-derived logic of discipline-based social groupings. Firstly, developments in knowledge areas themselves will lead to differentiation within groupings:

> In knowledge-bearing systems, interest is largely attached to bundles of knowledge. As knowledge splits, so does interest, and visa versa, in interaction between the two. (Clark, 1983a: p. 216)

Secondly, Clark (following Durkheim) suggests that competition (or the avoidance of competition) gives rise to specialization. Durkheim, laying out his theory of the forces which drive the division of labour in society, noted that:

> The struggle between two organisms is as active as they are similar. Having the same needs and pursuing the same aims, they are in rivalry everywhere. (Durkheim, 1947: p. 153)

Specialization is a strategy that avoids direct confrontation and enables legitimate claims by members of a grouping to a piece of turf, especially in disciplinary contexts which are "likely to be conflict-ridden because of low consensus on paradigms, e.g. history or political science" (Clark, 1983a: p. 219). A third and related source of tension within disciplinary groupings which can give rise to differing orientations within a single setting are the differing logics informing the production of knowledge and the transmission of knowledge. The logic of research tends to be "more anarchic as individuals follow their own leads" (*ibid*: p. 211), while the logic of curriculum tends to be more integrative as knowledge from various specialist areas is pulled together in packages for neophytes. From this tension emerges the classic division between knowledge-oriented and learner-oriented approaches which frequently divide academics. Thus academics are both socialized into powerful disciplinary cultures, and pressured to pursue distinctive individuation within those cultures.

Becher (1989) also finds a broad (though not exact) pattern of correspondence between "forms of knowledge and the characteristic cultures of those who engage in them" (*ibid*: p. 150), between the cognitive discipline or specialism and the social

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community or specialist network. Amongst his many observations, he notes that disciplinary communities, whether tightly knit or more loosely so, "owe their very existence" to the "mutuality of its members' scholarly interests and concerns" (*ibid*: p. 152). Both membership and allegiance, identity and intellectual comportment, are predicated on the cognitive norms of the discipline or specialism. Although in a second edition of this landmark book (Becher & Trowler, 2001) it is conceded that a wider variety of cultural influences may shape the dispositions of academics, the central thesis of Becher's argument continues to point to the salience of the cognitive in conditioning the cultural.

While discipline-based structures may be the most powerful sources of academic identity and culture, they are not the only ones. Clark notes that the ideological richness of academic systems arises in part because of "a plurality of nested groupings that manufacture culture as part of their work and self-interest" (1983a: p. 75). The groupings are at four levels: the discipline, the institution or 'enterprise', the academic profession, and the national higher education system. Of these, the discipline and the enterprise are the primary forms of organization which produce the "more specific sets of beliefs that academics live by", while the profession and the national system "bring to bear more general traditions, ideas and categories of thought" (*ibid*: pp. 75-76). In Clark's view, "higher education must be centred in disciplines, but it must simultaneously be pulled together in enterprises" (*ibid*: p. 32). These two converge in the form of the basic operating unit, usually a subject department. These constituent parts of the enterprise have a greatly enhanced centrality in the enterprise, compared to the relative salience of the constituent parts of other kinds of organization in society. Clark argues that this primacy of subject departments, based on the crucial characteristic of being authoritative in its own intellectual field, affects "everything else of importance in the organization" (*ibid*: p. 34). The autonomous orientation of the department is thus set against the integrative dispositions of the enterprise, and of the system as a whole.

Clark warns us, however, that the normative logic which governs the understructure (discipline-based departments and other operational units) is likely to be at odds with the logic which informs the superstructure (the state and regulative agencies). On the one hand, the understructure is "possessed by the logics of discipline, expertise and

professionalized disorder" with a tendency towards fragmentation and proliferation while, on the other hand, the superstructure of the state is driven to achieve administrative coherence as it seeks to impose a unifying order on the otherwise diverse and restless institutions and disciplines. The middle structure, consisting of institutional (or 'enterprise') management must mediate between these two countervailing impulses, sometimes siding with one or the other, depending on the relative strength and power of the bottom and the top. Two different vectors of change are thus at work respectively at the top and at the bottom: in the superstructure "the vehicle for change is thus political and bureaucratic co-ordination, as opposed to the vehicle of professional influence, which is primary in the understructure" (*ibid*: pp. 206-208). Given the likelihood of the dispositional disjuncture between the two levels, it is essential we understand more clearly the motivations which animate the responses of the understructure to change initiatives which come down from the top, both when they resist (as has been now well-documented) and when they appear to comply (which is the focus of this study).

This foundational work of Clark and Becher has not gone entirely without critique. Trowler (1998) has characterized their accounts as being rooted in "epistemological essentialism". This is a tradition, he argues, which sees the individual "as the player of predetermined roles ... highly prescribed, epistemologically conditioned, received from cultural leaders and relatively context independent" (*ibid*: p. 59). Trowler has two broad problems with this approach. The first is that the categorizations developed by Becher and Clark function as useful ideal types in the Weberian sense, but are less useful as empirical descriptions, since, "in practice, individuals have considerable freedom to depart from the models depicted and they do so" (*ibid*: p. 60). In Trowler's view, studies like that conducted by Becher have arrived at their essentialist conclusions because they have tended to study only the elite end of the system, the senior academics in relatively well-established, high-status disciplines in prestigious institutions. It is not surprising, Trowler continues, that the salience of the discipline emerges in these contexts, but such studies ignore the wider range of factors that may be at play in lower-status contexts. Equally, essentialist accounts fail to include an analysis of the role of power in academic contexts, overestimating the autonomy that disciplines and individuals are able to exercise. Again this derives from the focus on the elite end of the system, and fails to account for the experience of lower-status

individuals, disciplines and institutions. In the latter cases, Trowler suggests, the cultures of institutions and the identities of individuals may reflect the influences of a wider range of socializing structures, including those from outside the academy.

Although Mary Henkel (2000) endorses Trowler's concern about the essentialism of Clark and Becher's approaches (e.g see *ibid*: p. 22), she nevertheless draws centrally on Clark's framework, taking the discipline and the enterprise "as the main institutions or communities within which academics construct their identities, their values, the knowledge base of their work, their modes of working and their self-esteem" (*ibid*: p. 22). Henkel (again drawing on Clark) makes the case that academics stand in a matrix "formed by the cross-cutting imperatives of discipline and enterprise (the university or college)", and that the institutional form of this intersection is the academic department. Academics thus experience "the complexities and tensions inherent in two major sources of identity, one local, visible and tangible, the other cosmopolitan, largely invisible and disembedded" (Henkel, 2000: p. 19).

Henkel goes on to invoke Pierre Bourdieu's (1975) account of identity in the academy, and notes that the processes of identity formation in the field of science are essentially competitive: "Competitors have both to distinguish themselves from their predecessors and their rivals and to integrate the work of these groups into a construction that transcends it. The achievement of identity is therefore instrumental to the way in which science works" (Henkel 2000: p. 18). Bourdieu argues further that the various scientific fields have strongly differentiated power and status, stand in competition with one another, and are "the locus of competitive struggle" for individual scientists located within the fields: "What is at stake is the power to impose the definition of science ... best suited to [the individual scientist's] specific interests" (Bourdieu, 1975: p.23, cited in Henkel, 2000: p. 17). At issue is "the relative value and potency of rival kinds of capital, as set in particular by the going 'exchange rate' between economic and cultural currencies" (Wacquant, 1996: p. xi) which validate, or devalue, their associated identities.

The field of higher education is thus itself a deeply contested field, containing a high degree of internal differentiation that reflects the broader range of fields in contemporary society which extends "from the economic field, at one end, to the field

of cultural production at the other" (Wacquant 1996: p. xi). The potential internal conflicts between (and over) rival forms of capital (economic and cultural) are defused by high degrees of autonomy, and by "recognizing and rewarding diverse claims to scholastic, and thence social, excellence" (*ibid*: p. xii).

Academics themselves are not the only ones vying for the power of definition over the identity of educators and learners: they must contend with the strategies of policy makers and other wielders of symbolic capital. Pedagogic identity, as Basil Bernstein has observed, emerges as reflection of differing discursive bids "to construct in teachers and students a particular moral disposition, motivation and aspiration, embedded in particular performances and practices" (Bernstein, 1999: p. 246). In particular, attempts at curriculum reform aim to incline pedagogic dispositions one way or another. Consistent with the accounts outlined above, Bernstein (who acknowledges his debt to Mary Douglas) emphasizes that the construction of identity is not a purely solitary and inward psychological construction, but that it is formed through social processes. Identity, he says, "is the dynamic interface between individual careers and the social or collective base. ... [I]dentity arises out of a particular social order, through relations which the identity enters into with other identities of reciprocal recognition, support, mutual legitimization and finally through a negotiated collective purpose" (Bernstein, 1996: p.73).

The overwhelming consensus in this literature is thus that various social institutions within or related to the academy work to condition the professional identities of academics. While we acknowledge that the fuller identities of individuals are shaped by socializing agencies outside the academy, there is a strong convergence in the literature about the conditioning effects of especially the disciplinary setting and to a lesser extent the specific institutional context (what Clark calls the 'enterprise') on the dispositions of individual academics. This understanding of the profound role played by disciplinary norms and cultures in the construction of academic identities, and as the basis of solidarity in academic communities, is thus central to understanding how academics in the 'understructure' respond to exogenous pressures for change. Clark's (1983a) warning that the normative logic informing the understructure is likely to be at odds with the logic driving the policy-making 'superstructure' of the system raises a central question: if academic dispositions and professional allegiances are

predicated so centrally upon introjected disciplinary concerns, then what is the prospect for the new forms of social organization and identity proposed in the policy which calls for academics to work in multi- or interdisciplinary programme teams, subordinating themselves to a collective project of external accountability? Further, if traditional individual autonomies were to be relinquished and such teams are formed, what values and motivations would circulate among academics, and what would be the basis of any emerging group solidarity? In the absence of a common disciplinary epistemology, what principle or authority will become the basis for adjudicating between competing claims on the new curriculum?

The next section will review the recent international literature on how academics have responded to policy-driven pressures for change.

2.4 The Responses of Academics to Pressures for Change

This section reviews three major international studies which focus on the responses of the 'understructure' to policy-driven initiatives aimed at steering higher education systems in particular directions. Each of these studies considers in one way or another the consequences of such policies for the cultures and identities associated with academic work, and the extent to which the dispositions of academics are subject to influence by such policies.

In his study, Trowler (1998) illustrates his view that individuals are both recipients of cultural conditioning and active constructors of meaning in their own particular contexts. He argues that in the context of attempts to achieve large-scale re-orderings of practice and culture in universities, the responses of academics will be "largely but not wholly conditioned by the configuration of the cultural traffic flowing into and through the organization" (*ibid*: p. 153). For my purposes, Trowler's significant contribution in his study is to document the variety of motivations which inform the responses of individuals on the ground. Set in a "new" university (i.e. a non-elite institution) in the United Kingdom, his study focuses on the 'top-down' implementation of a university-wide innovation (the introduction of a credit

accumulation and transfer framework[7]). He shows in considerable detail how academics respond more or less actively in a variety of ways that vary from compliance, to reconstruction of the policy, to resistance. He shows how a limited number of academics in this context were able to respond to the policy in ways that advanced their own personal agendas, usually finding an opportunity to position their own intellectual interests more advantageously by establishing a new programme, or maximising student numbers in their disciplinary area, while others valued the increased opportunity to engage more deeply in issues of pedagogy. Other academics resorted to instrumental strategies to cope with the increased workloads and diminished resources, strategies that included 'working-to-rule', becoming less available to students and avoiding meetings. But the largest category of staff responded by re-interpreting and reconstructing the policy on the ground, "using strategies to effectively change the policy, sometimes resisting change, sometimes altering its direction" (*ibid*: p. 126). Here strategies involved using the policy as cover for reducing, rather than increasing, curriculum flexibility and thus limiting student options, evading the requirements of outcomes-based approaches, or "creating local practices and understandings in order to by-pass central ones" (*ibid*: p. 131).

He concludes the study by noting that in the face of such top-down approaches to organizational adaptation, academics are by and large unlikely to sign up to a 'vision' imposed from the top, unless they can see a clear profit in it for themselves. The general message of his study, seen from a managerial view, is a negative one, he says, illustrating "the ability of academic staff to obstruct and change policy during its implementation phase" (*ibid*: p. 153). Thus even in a "new" university context, and in less well-established disciplinary settings, where disciplinary identities may not be as deeply socialized as in more elite settings, academics still have a considerable capacity to act autonomously and to resist or evade the intentions of policies that are seen to run counter to the values and interests of academics, even when these policies are strongly endorsed by institutional management.

[7] In her 2002 study, Ensor notes how the discourse of 'credit accumulation and transfer' also circulates in the policy texts advocating programmes in South Africa. This is a discourse which advocates maximum modular flexibility in the curriculum to enable the learner to progress seamlessly across a higher education system which is closely indexed against the National Qualifications Framework. This 'market' position is at odds with the integrative discourse of interdisciplinarity which limits student flexibility in the interests of 'coherence'. Although the 'CAT' discourse is at work in the policy texts, it is not taken up in any significant way in the institutions under study in this thesis.

By contrast, Mary Henkel's (2000) study focuses on well-established disciplinary settings across a representative range of eleven institutions, and examines the extent to which major changes in the policies and structures of higher education have changed what it means to be an academic in the United Kingdom. In this regard her study focuses on 'mainstream' academic communities, in contrast with Trowler's study which set out to include newer, more marginal disciplinary communities in a "new" post-1992 university. Keeping in mind the constituency of her study, Henkel nevertheless finds that "one of the most persistent themes in this study is that academic working lives [continue] to be centred in their disciplines, whether they saw themselves primarily as researchers, teachers, managers or a combination of more than one of those" (*ibid*: p. 256). In this regard, she confirms the ongoing centrality of academic autonomy in the lives of academics. This individual freedom is a "quality of life" issue at both a professional and personal level, and this autonomy provided "the conditions they needed to do work and therefore the conditions in which their academic identity was grounded" (*ibid*: p. 257). But many academics perceived their autonomy to be increasingly curtailed by an imposition of extrinsic administrative and political agendas embodied in the modularization of curricula, quality assurance measures and commercialisation: "in other words, their normative space had been invaded and their sense of self-esteem had been shaken" (*ibid*: p. 261).

Henkel maintains that the growing climate of managerialism experienced by academics may have strengthened rather than weakened the ways in which academics identify with their disciplines and home departments. Although state policies and institutional management had increased levels of intrusive control over the "lives, relationships and self-perceptions of academics", this has had the effect of weakening the ways in which academics identified with their institutions: "indeed they could become targets for opposition and a means by which academics consolidated their sense of professional identity through differentiation from the management of the institution". By contrast, academic departments "become the sites for collective opposition or the development of strategies to sustain the departmental interests" in the face of encroachments from management or the state (*ibid*: p. 254).

In the face of these challenges to individual and collective identities, Henkel continues, the responses of academics can be "understood as more or less conscious strategies to conserve academic identities, collective and individual" (*ibid*: p. 261). While a powerful minority have been able to ignore the policy changes, more common strategies have been to distort or subvert the policies in their interpretation, or to comply at a rhetorical level but with minimal actual change (*ibid*: p. 262). While some academics have responded to the entrepreneurial opportunities (e.g. biochemists), broadly speaking the "accommodations" that academics have reached with the new discourses and modes of management could be seen as a strategy of "constructive ambiguity" in which changes of varying substance are undertaken by academics, "but with their values, beliefs and agendas essentially undisturbed" (*ibid*: p. 264). In this way the academic profession could be seen as relatively adaptive to external changes in the environment whilst sustaining "long held values and traditions"; in a context of transitions, Henkel concludes, the result is "a story biased towards stability rather than change" (*ibid*: p. 265).

This trend of stability in the face of exogenous pressures for change is confirmed in Peter Maassen's (1996) comparative study of the Dutch and German systems, where he examined the extent of culture change amongst academics after a ten-year period under a new steering strategy aimed at relinquishing direct controls in favour of greater levels of self-regulation, in order to achieve a more flexible, entrepreneurial system. Maassen chose the Dutch and German systems because, he argued, these systems had, on the one hand, similar academic roots while, on the other hand there was a distinct "gap" between these two systems in the implementation of steering strategies. Holland was seen to be a "leading" country in this regard, whilst Germany was thought to be "lagging behind" (*ibid*: p. 10). He identifies three indicators to act as measures of the degree to which institutions, and individual academics, have responded to the changed steerage strategy by shifting (following Mary Douglas, 1982) from strongly hierarchical cultures to more individualist ones. These indicators are the level of competition, the intensity of evaluation, and the extent of decentralization (*ibid*: pp. 97-8).

Although Maassen finds at an *institutional* level that Dutch universities did show higher levels than German institutions against these three indicators, he found no

significant differences between Dutch and German *academics* in terms of their personal orientations to the variables represented by the indicators. So although there were marked differences between Dutch and German institutions, there was little or no discernable difference between their respective academics in terms of cultural orientation[8]. His study suggests that although government steering can have an impact on the social institutional context of higher education, the impact on what he calls 'the human factor' in these contexts is less predictable. In this way, his study confirms the results of Trowler's and Henkel's work, illustrating the weak capacity of institutional management to diminish the effective autonomy of academics, and bring about substantive changes in directions that are inconsistent with the values and interests of academics on the ground.

He did, however, find significant differences along disciplinary lines, where his results suggested that academics in the natural sciences and (to a lesser extent) the humanities place a higher value on personal autonomy and decentralisation than did their colleagues in other fields, notably the professions. Although there were no significant differences between the fields against the other two indicators (competition and evaluation), this finding is important both in terms of supporting Clark's thesis that the discipline is an important basis for understanding cultural differences, and in terms of predicting the difficulties that might be encountered in operationalizing a modified social division of labour in these disciplinary areas, as the programmes policy in South Africa suggests.

To conclude this section, then, some major studies which focus on the cultures and identities of academics seem to converge on several major findings. Firstly, there emerges a confirmation of the cultural diversity within the academic profession, but a diversity which owes much to disciplinary socialization, and to specialisms within disciplines. Although Trowler shows us how other cultural influences permeate the academy as well, we see how disciplinary socialization is a remarkably resilient and persistent resource shaping the values, priorities and practices of the academy. It seems likely that this influence works more powerfully as individuals deepen their

[8] He did however find a counter-intuitive result, which was that German academics appeared to be somewhat more competitive than their Dutch counterparts in spite of the "lead" that Dutch universities have had in promoting this characteristic. (*ibid*: p. 152)

commitment to academic careers and as their status and rewards are increasingly defined in terms of the values and hierarchies of higher education. Secondly, there is broad consensus that autonomy continues to be a characteristic that is deeply-valued by academics, not only because of the personal and professional freedom it affords, but also because it is central to the traditions of basic research. These are strong features of the natural sciences and humanities, the fields under consideration in this study. In these areas, autonomy is widely viewed as an inherent characteristic of academic identities. Thirdly, although state policies, and institutional administrations in several higher education systems internationally have made concerted efforts to curtail autonomies and shift academic practices towards greater external and instrumental accountabilities, academics have shown a consistent capacity to adapt to these pressures in ways that preserve fundamental values, practices and identities.

While these important studies have properly emphasized the broad capacity of higher education systems to resist exogenous pressures for change, there remains nevertheless the intriguing but under-reported minority response of academics who appear to comply willingly with external policy initiatives, academics who appear to see opportunities in the new dispensations and who grasp these with enthusiasm. Both Trowler's and Henkel's studies suggest the existence of this category of academics, but a close examination of their motives and experiences tends to be drowned out by the broader resistances, refusals and evasions which comprise the dominant theme. Given the adaptive challenges faced at all three levels of higher education systems (superstructure, middle structures and understructure), it is important that we understand the minor undercurrents that may be working at odds with dominant trends, since these may represent the adaptive edge of a system where change tends to be incremental rather than sweeping.

In addition to these considerations noted above, the South African policy context under consideration here presents a further challenge which deepens the complexity of the proposed reform. This is the challenge presented by the increasing occurrence of (or at least increasing calls for) cross-boundary collaboration. Typically such initiatives tend to be cases of interdisciplinary research, where the motivation for participation across fields is usually intrinsic, emanating from the intellectual project at hand. But calls for such forms of collaboration in higher education contexts other

than knowledge production are widespread, and curriculum is a case in point. Although 'progressivist' and outcomes-based approaches to pedagogy, and quality assurance measures (features of many reforms internationally) all imply greater connectivity across boundaries, this is a development which remains virtually entirely unreported in the studies above. Yet, as I shall discuss below, this cross-boundary collaboration has significant consequences for traditional academic divisions of labour, and thus for the value systems and identities of academic on the ground. In the next section, I briefly review the literature on efforts to achieve interdisciplinarity in curriculum to show that this kind of enterprise, even when initiated from within, is not without its difficulties.

2.5 Interdisciplinarity in curriculum

In her comprehensive treatment of interdisciplinarity, Klein (1990) notes that the problem of definition of 'disciplinarity' and 'interdisciplinarity' is "compounded by the continuing rhetorical opposition of disciplinarity and interdisciplinarity, an oversimplified dichotomy that obscures the more subtle interactions that do take place" (*ibid*: p. 105). She summarizes the many different attempts to classify types of disciplines, points to the often wide scope and fissiparous nature of disciplines, and shows the difficulty of determining the boundaries between disciplines. Because of this, she continues, we would be wise if we were to see that "disciplinarity and interdisciplinarity are not only relative to each other, but also time-bound in character" (*ibid*: p. 106). Rather than seeing these terms as stable empirical objects, she offers a view that links the terms with purpose and positionality:

> Unfortunately, discipline is too often confused with "department" and the competition for resources within the academy. Yet "discipline also signifies something else, a stable epistemic community and agreement upon what constitutes excellence in a field. When tied to this meaning, disciplinarity has an undeniably positive value. When tied to the dangers of prematurely settling on a paradigm or excluding certain dimensions of a problem, it has a negative value in the discourse. "Discipline" then becomes a threat to the invention that gave rise to interdisciplinarity in the first place. (*ibid*: p 107)

The difficulties of definition notwithstanding, many authors have tried their hand at tying down the slippery notion. One of the most economical is Nissani's (1995)

formulation: "bringing together in some fashion distinctive components of two or more disciplines" (*ibid*: p. 122). There is an extensive literature devoted to coming to grips with "in some fashion", and a variety of terms are in currency which attempt to capture the many approaches, including multidisciplinary, cross-disciplinary, transdisciplinary, but as Mudroch (1992) notes, these terms "have mostly either been abandoned or are now used as synonyms" (*ibid*: p. 45). In this study I will use only two terms in the context of educational programmes (not research): *multidisciplinary* and *interdisciplinary*, where the former suggests co-operation between disciplines with no attempt at integration, while the latter suggests some attempt at synthesis, integration or mutual enrichment, often in the creation of a new subject, or the development of a meta-discourse (Klein, 1990: p. 161; Mudroch, 1992: p. 45). I will not attempt here to rehearse the debates on the variety of modes of interdisciplinarity identified in the literature, nor the extensive evidence of the difficulty of trying to reach enduring definitions. My interest instead is in the *social* experience of trying to sustain multi- or interdisciplinary initiatives in contexts where knowledge has traditionally been ordered along disciplinary lines.

In his review of such initiatives, Trow (1984-5) has noted a trend where academics enter interdisciplinary projects with a secular zeal, often in expansionary and resource-rich times, but as time passes the extensive effort needed to sustain such projects becomes increasingly exhausting and decreasingly fulfilling, and the inevitable conflicts and competition for resources that arise often lead to withdrawal and closure. Leydesdorff & de Klerk (1998) similarly find that projects which appear intellectually feasible face the challenge of working in a context where "the sciences are nowadays deeply *dis*-united at theoretical and methodological levels" (*ibid*: p. 22) and may be undermined in an institutional environment "characterized by intense competition" (*ibid*: p. 23). Carfagna (1997) shows the extensive network of collaborative relationships that need to be sustained, not only across disciplinary boundaries, but across the academic-administrative divide as well, if interdisciplinary programmes are to be sustained. Such initiatives, she argues, require particularly strong and consistent leadership in order to address the "underlying tensions and conflicts of interests which will undermine the effectiveness of the core" (*ibid*: p. 68). Even in the rare cases where clear institutional backing and institutionalization has protected interdisciplinary initiatives, academics find themselves cut off from their

disciplinary bases in ways which undermine them intellectually and in terms of career development (Mudroch, 1992). Pirrie (1999) finds that even in contexts where cross-boundary collaboration is strongly mandated (in many medical education programmes, for example), the support for such collaboration tends to be rhetorical rather substantive. It is worth quoting at some length her conclusion about how the disciplines maintain their autonomy in spite of policy pressures for integrated curricula:

> We suggest they achieve this through a combination of operative closure and cognitive openness. By the former we mean that knowledge is generated, regulated and maintained within the profession itself, and its relative autonomy preserved. ... And yet the very exclusiveness signaled by these terms is inextricably bound up with the profession's openness to social facts, political demands and human needs. The health professions are susceptible to environmental 'white noise', they pick up the signals and promulgate statements ... which are characterized by injunctions to 'prepare practitioners for collaborative working' ... However it would be erroneous to suggest that such statements constitute evidence of a true meeting of minds and marriage of ideals. These episodic couplings are largely born out of expediency, and are, we contend, nothing other than homeostatic mechanisms for regulating and maintaining existing power bases. (*ibid*: p123-4)

In short, although the literature suggests that there continues to be enthusiasm for interdisciplinary or integrated curricula, experience points clearly to the considerable social and organizational challenges and costs of sustaining such initiatives, which are always under pressure for (what Klein, 1990, describes as) a "regression to disciplinary modes" (*ibid*: p. 159). Given, then, the predisposition of academics to resist exogenous policies that are at odds with their own value systems (as was discussed in the previous sections), and the particular social difficulties of sustaining cross-boundary initiatives (outlined in this section), the opportunity to understand the constitutive resources which contribute to compliant dispositions in such contexts has the potential to contribute to our understanding of institutional adaptive behaviour.

2.6 Conclusion

In order to look at the issue of institutional adaptation, especially compliant adaptations, this study focuses on the 'micro-foundations' of attempts at curriculum

reform. The study locates itself broadly within a neo-institutional theoretical account of institutional change, keeping in view as well the resource dependencies which may also condition adaptations. Of particular interest are the value systems which structure the responses of academics, individually or in groups, as they participate in sweeping curriculum restructuring exercises. In order to analyse the normative projections offered by the academics interviewed for this study, I have drawn on the notions of culture and social identity, and the reciprocal relations between individuals and social groupings which sustain meanings and practices. I have reviewed a body of widely influential literature which debates the effect of the key social institutions of higher education on the identity dispositions of academics. This literature convincingly attributes the widely documented resistance by academics to exogenous pressures for change to the resilience of foundational values and beliefs held by academics, often associated with deep disciplinary socialization.

I make the case that, while the phenomenon of resistance to policy is now increasingly well documented and understood, the contrary (and minority) trend of compliance with policy, and an apparent willingness by some academics to accede to a shrinking of their autonomy, represents an interesting and under-researched phenomenon. Further, the phenomenon of cross-boundary collaboration is evidently a fraught enterprise, and I make the case that the South African programmes policy presents a valuable opportunity to examine cases where academics enter willingly into such collaborative ventures.

In the next chapter I will outline the interpretive frame to be used in the empirical component of this study, which examines the motivations and values advanced by academics who seem to fall into this category, as well as their experience of attempting to participate in changing divisions of academic labour with regard to curriculum.

CHAPTER THREE: AN ANALYTIC FRAME FOR INTERPRETING IDENTITY DISPOSITIONS

> A pedagogic identity is the result of embedding a career in a collective base. ... It is commonplace today to say that over the last fifty years there have been major changes in the collective base of European societies, and major changes in the principles of social order. There have also been major changes in the contexts in which careers have been enacted, whether these contexts be international, national, domestic, economic, educational or leisure. Curricula reform today arises out of the requirement to engage with this contemporary cultural, economic and technological change. (Bernstein, 1999: p. 247)

South Africa's 'programmes' policy presents challenges to South Africa's higher education system which are comparable to the challenges faced by British and European systems in that they are part of a larger move towards a more managerial system, and the curriculum restructuring component of the policy is seen by many to threaten a direct curtailment of traditional academic autonomies. The requirement that academics organize themselves into programme teams represents a potentially significant departure from traditional curricular practices. As the review of the international literature would enable us to predict, and the review of the South African literature has confirmed, academics in South Africa have by-and-large resisted the spirit of the programmes policy even though the letter of it may have been observed in various ways. There have, however, been some significant cases of apparent compliance and this study has been designed to examine some of these, focusing especially on instances that have emerged in elite settings, contexts where one would have predicted the deepest levels of resistance. The study thus focuses on motivations and rationales, and examines the extent to which traditional divisions of labour may be shifting in favour of cross-boundary collaboration.

I will draw on, and extend, the use made by Peter Maassen (1996) of Mary Douglas' (1982a & 1982b) work, introduced in the previous chapter. I will propose a slightly different application of Douglas' categories, to suit the particularities of the South African policy context, tracing the movement across the quadrants suggested by the programmes policy. I will then draw on the work of Basil Bernstein (who works in the same Durkheimian tradition as Douglas) to elaborate some of the identity

characteristics of the new positionalities suggested by the policy. Finally I adapt Bernstein's categories, and Ensor's (2002) adaptations of these, into a set of terms for use with the empirical data of this project. To introduce all this, I will begin with a discussion of curricular issues, following the work of Bernstein.

3.1 A Theory of Curriculum

Bernstein has developed a theoretical language of description with which to explain "the inner logic of pedagogic discourse and its practices" (Bernstein 1996: p. 18). Bernstein's elaboration of the 'pedagogic device' outlines "the condition for the production, reproduction and transformation of culture" (Bernstein 1990: p. 180). The pedagogic device provides for three sets of hierarchically arranged 'rules': distributive rules, recontextualising rules, and rules of evaluation. In this study, the focus will lie on the first two of these sets of rules, with particular emphasis on recontextualisation.

Distributive rules, according to Bernstein, are the means by which different knowledges (and thus different forms of consciousness) are distributed to different social groups in ways that generally tend to reproduce broad social order. In this way, powerful social groups control access to the 'thinkable' (established knowledge) and to the 'unthinkable' (the production of new or alternative knowledge). Distributive rules thus "mark and distribute who may transmit what to whom, and under what conditions, and in so doing attempt to set the outer and inner limits of legitimate discourse" (*ibid*: p. 18). In the context of universities, attempts to widen access to tertiary education to previously excluded groups constitute efforts to contest distributive rules, but as we have seen (for example, in the case of attempts to widen the participation of working class students in the UK), such distributive boundaries are not always easily shifted.

If the distributive rules identify the broad boundaries of who has access to what knowledge, then the *recontextualising rules* are the ways in which specific pedagogic discourses are constructed for the purposes of producing specific pedagogic subjects. Recontextualising rules are thus the principles by which knowledge is selectively appropriated from fields of practice, and re-shaped and relocated so as to constitute the curriculum for an educational context. Bernstein makes an analytic distinction

between two dimensions of this pedagogic discourse: an *instructional discourse* of content and skills that is embedded in a *regulative discourse* of social order (see below under 'framing'). This latter regulative discourse governs what is selected for use in the curriculum and how it is to be transmitted. For example, SA's Education White Paper asserts a regulative order for higher education curriculum based on the notion of 'programmes', and connects this to the wider discourses of national social and economic development in the context of globalisation on the one hand, and the NQF and OBE on the other hand. However, as noted earlier, the policy discourse of 'programmes' is equivocal and ill-defined, calling for vocationally-focused skills and interdisciplinarity at some points, and asserting the value of traditional disciplinary training at other points. Configured in this way, it thus remains for this regulative principle to find definition at local institutional levels, and thence to shape the instructional discourses in specific contexts.

Central to this study is the exploration of the various regulative discourses invoked by academics to legitimate their curricular responses to the policy. In this way we explore the value systems that structure curricular practice at a time of policy-driven attempts to restructure these practices. These values include the varying motivations that prompt academics to undertake significant changes in curriculum, or to resist such shifts. They also include the primary allegiances that academics articulate, whether in relation to their discipline, their institution, the academic enterprise more broadly, or the 'market' in whatever form.

But before we explore a language for these differing value orientations, we should establish a set of terms with which to discuss curriculum. Bernstein uses the terms *classification* and *framing* to describe how curriculum is ordered. Classification describes the relationships between disciplines, or bodies of disciplinary knowledge in a pedagogic setting, and how they establish and maintain the boundaries that mark their identity. These boundaries are a function of the relative power and status of disciplinary discourses, where powerful disciplines are able to maintain strong insulations, and unique voices and identities, as opposed to weakly classified disciplines which tend to have "less specialised discourses, less specialised identities, less specialised voices" (Bernstein, 1996: p. 21). Significantly, the strength of

disciplinary identities, argues Bernstein, lies in their capacity to insulate themselves from other disciplines.

It is useful at this point to differentiate between the macro-level of the broad arrangement of disciplinary knowledges, and the micro-level of particular curriculum structures within individual institutions. At a macro level, Bernstein has developed important conceptual tools which enable us to differentiate knowledge forms, firstly in terms of the inherent structure of the knowledge, and secondly in terms of the relationships between bodies of knowledge. Within the realm of specialized systematic knowledge (as opposed to everyday knowledge), Bernstein distinguishes between knowledge areas which have vertical or *hierarchical* knowledge structures (e.g. mathematics or physics) and those characterized by *horizontal* knowledge structures (e.g. sociology or history). A hierarchical knowledge structure aims to integrate new knowledge under higher order general propositions, and this is typical of the natural sciences. By contrast the horizontal knowledge structures characteristic of the social sciences and humanities tend to consist of "a series of specialized languages, each with its own specialized modes of interrogation and specialized criteria" (Bernstein, 1996: pp. 172-3). A question which arises from this distinction, notes Bernstein, is whether the differential internal structuring of these knowledge fields exerts any influence on the positioning and practices of their respective agents (*ibid*: p. 176), an issue pertinent to the study at hand. In terms of the relationships between differing knowledge areas, Bernstein holds that there are those that are distinctly insulated from other knowledge areas: these are *singulars* (e.g. physics, chemistry, history, economics, psychology); by contrast, where once-insulated singulars have converged intellectually or in fields of practice, these are *regions* (e.g. engineering, medicine, architecture, cognitive science, management) (*ibid*: p. 23).

Bernstein then distinguishes how these knowledges may be curriculated at an institutional level, and contrasts two ideal-type forms of curriculum structure: a *collection-type* curriculum where the individual disciplinary components of the curriculum remain insulated from each other, and an *integrated-type* curriculum where different disciplinary components are brought together on a principled basis (Bernstein, 1975: p. 80), for example in the consideration of a common problem, and ideally in the production of a common discourse, perhaps reflecting the development

of a new or regionalising discipline[9]. The policy requiring a shift towards a programmes-based system is thus exerting pressure for a weakening of classification (and thus of the insulation) between disciplines at the level of curriculum structure in institutions. The pressure (especially on non-professional faculties) is thus for a move from a collection-type towards an integrated-type model.

Framing, on the other hand, refers to control over the selection, sequencing and pacing of the content of a curriculum: who controls these decisions, and which principles govern this ordering in any particular context? Bernstein argues that the *instructional discourse* (reflected in the selection, sequencing and pacing of content) is governed by broader rules of social order *(regulative discourse)*: "the instructional discourse is always embedded in the regulative discourse" (*ibid*: p. 28). The programmes-based policy under discussion here thus represents an attempt to shift the regulative discourse that controls the framing of curricular content. In a collection-type mode the principles governing the selection, sequencing and pacing of content are governed from within disciplines, whereas an integrated-type model looks to "some relational idea, a supra-content concept", a logic external to the disciplines for at least some of these principles. This external logic could be found in a field of practice (as in the professions, or newly regionalising areas of knowledge), or in some other holding discourse, like a policy imperative. The programmes policy also implies possible shifts in who has the final say in what these principles should be, and how they should be applied. In a shift away from high levels of individual autonomy in this regard, or from the role played by specialist disciplinary networks, the policy suggests that the social network around an individual programme may adjudicate on that programme's content, and implies also an enhanced role for external structures associated with quality assurance.

To use Bernstein's terms, the policy aims firstly to weaken the classification between disciplinary boundaries in a move away from collection-type and toward an integrated-type curriculum model. Secondly, it aims to modify the framing of curricular content by rendering disciplinary principles of curricular regulation

[9] In his later (1996) work, Bernstein uses the terms *collection code* and *integrated code* to refer to the differing ways in which horizontal knowledge structures and hierarchical knowledge structures

subordinate to external principles of regulation, thus impacting on the instructional discourse.

Bernstein argues that such a move has consequences for the forms of organisation and power structures within institutions. Under collection-type mode, staff owe allegiances to - and authority circulates within - the discipline or the department. He notes that under these circumstances,

> staff have been socialized into strong subject loyalty and through this into specific identities. These specific identities are continuously strengthened through social interactions *within* the department *and* through the insulation between departments. (Bernstein, 1975: p. 103)

In academic contexts, this socialization is conditioned by both subject departments in an institution, and by the distributed network associated with the individual's particular specialism. But under integrated-type curricula, staff from different disciplines are (ostensibly) united in a common endeavour, and the horizontal relationships formed in this way result in more complex patterns of power, authority and identity.

> Now the integrated code will require teachers of different subjects to enter into social relationships with each other which will arise not out of non-task areas, but out of a shared co-operative educational task. The centre of gravity of the relationships between teachers will under go a radical shift. Thus instead of teachers and lecturers being divided and insulated by allegiances to subject hierarchies, the conditions for their unification exist through a common work situation. (Bernstein 1975: 103- 104)

Thus the changed relationship between disciplinary knowledges is paralleled by a changed relationship between the educators. But there are conditions for the successful establishment of an integrated-type curriculum: staff participating in such an arrangement "are part of a strong social network[10] (or it *must* be strong if the

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respectively accumulate new knowledge. In this study, I use the terms in his earlier (1975) sense, as I have outlined them here.

[10] In some of his earlier work, Bernstein (1975) suggested that collection code forms of curriculum were characterized by principles of social integration between staff members which could be likened to Durkheim's notion of mechanical solidarities, while integrated code curricula were, relatively speaking, more characteristic of organic solidarities (*ibid*: pp. 67-75). Later, Bernstein (1990) observes that behind his distinction between instructional and regulative discourses lie the concepts of mechanical and organic solidarities, suggesting that the discourse of 'specific competencies' (ordered according to

transmission is to work) which should be concerned with the integration of difference. And this is no easy activity" (Bernstein 1996: p. 25, emphasis in original). In short, for an integrated-type model to establish itself, the conditions have to be created in which a collegial sub-community, predicated on the goals of the programme in question, can come to agreement on what is to count as valid knowledge, why, and how it is to be recognised in the context of that programme: in other words, to arrive at a strong regulating ideal. Bernstein notes that "there must be consensus about the integrating idea and it must be very explicit. ... It may be that integrated codes will only work when there is a high level of ideological consensus among the staff" (Bernstein, 1975: p. 107).

In summary, the policy of programmatization exerts pressure on singulars to participate collectively in an integrated code in the way they pedagogize knowledge. In singular mode, individual disciplines (usually securely insulated from other disciplines) enjoy high levels of autonomy, and look to their own internal rules for what counts as legitimate pedagogic text. But the disciplines participating in an integrated code need to look beyond their disciplinary boundaries, towards some other external principle in order to guide choices about pedagogic content. Before now, however, the work of singular disciplines within the formative faculties have tended not to index specific fields of practice or occupational roles. The challenge of programmatization for these disciplines, where the occupational identities projected for graduates has hitherto been much more diffuse than in the professional faculties, is firstly to find authoritative regulative discourses that will link singulars in the production of an integrated curricular code. Secondly, it is to 'socialise' academic staff into 'a strong social network', with a high degree of consensus about the integrating idea, in order to align their respective disciplinary contributions with the purpose and methods of the integrated code of their particular programme.

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the principles of 'similar to'), and the discourse of 'order, relation and identity' (ordered according to the principles of 'different from') are respectively characteristic of these differing modes of the division of labour (*ibid*: pp. 210-212). The consistency between these two observations is found in Bernstein's suggestion that, in contrast to collection codes, integrated codes "must focus much more upon general principles. This in turn is likely to affect pedagogy: it will tend to emphasize ways of knowing rather than states of knowledge" (Bernstein 1975: p. 83), or in other words where the regulative is prioritized above the instructional, with consequences for previously steeply hierarchical relationships.

This obviously has significant implications for the values, orientations and priorities of academics. Bernstein's work, in effect, suggests that academics would need to be 're-socialised' into a new orientation, which involves changed priorities, and changed patterns of social relations, based on a differing principle of social integration. It is thus part of the interest of this project to explore what kinds of regulative discourse may be circulating in the construction of programmes, the nature of the orientations articulated by academics in this regard, and the nature of the commitments they may be demonstrating towards any new communities of practice that may be emerging in these contexts. I use the term *identity* to discuss these qualities, and in the next section, I will draw on Douglas' four-part typology of 'ways of life' (as used by Maassen), as well as other work by Bernstein on identity, to provide a conceptual framework for the discussion of academic dispositions.

3.2 A Conceptual Frame for Analysing Identity

As was outlined in the previous chapter, Douglas has proposed a typology of four 'ways of life' distributed across her 'grid/group' quadrant: the hierarchical, the egalitarian, the individualist and the fatalist. Maassen, in his (1996) study, argues that state steerage strategies assume they will bring about changes in the system by influencing the human factor indirectly, that is by affecting the social institutions in higher education, the universities themselves, the various professional structures which bind academics together, and the panoply of administrative rules and legal prescriptions which constitute the broader higher education system.

> In order to be effective a new governmental steering strategy directed towards higher education should aim at influencing the social institutional contexts of academics in such a way that academics will change their values and beliefs accordingly. If this happens it means that academics have moved from (in the eyes of the government) no longer desirable ways of life to the way of life consistent with the ideology underpinning the steering strategy. (Maassen, 1996: p. 93)

Maassen argues that the European policy context was urging a movement away from hierarchical towards individualist 'ways of life', and that policies were working to dismantle features which support the former (including the strong mechanisms of direct state control that characterized many European systems) and provide incentives

for the latter (particularly individual and institutional entrepreneurialism and competition). As noted earlier, although he found significant changes towards the latter direction at the institutional level in the Dutch system, this was not accompanied by a significant concomitant shift in the dispositions of Dutch academics.

In the South African context, the policy environment seems to be encouraging broadly similar shifts away from the hierarchical, although with some important differences. As was noted in Chapter One, the policy discourses are often plurivocal and contradictory. The traditional hierarchies of disciplinary knowledge are both defended and attacked. Ensor (2002) demonstrates how the discourses both defend the integrity of disciplinary knowledge while simultaneously urging a casting aside of restrictive boundaries and autonomies in a move towards interdisciplinarity. Similarly there exists a tension between, on the one hand, discourses that urge an instrumental bending of the resources of higher education to the needs of the economy and, on the other hand, those that prioritise the projects of equity, redress and social justice. It seems clear that these divergent discursive trends could be seen as mapping broadly onto the three 'ways of life' that Douglas has characterized as hierarchical, individualist and egalitarian. The hierarchic way of life would equate broadly with the traditional order of higher education (although the South African elite institutions, like their counterparts in the UK, would occupy a somewhat softer position in the hierarchic quadrant than the traditional European system, having had slightly less in the way of direct state control); the individualist way of life would correspond with the market-oriented discourses, and the egalitarian way of life would encompass an order which prioritized connective relations across traditional boundaries and principles of equity. As Douglas has noted (see Chapter Two), these ways of life are broadly incompatible, and a choice in one direction would exclude *simultaneous* options in other directions. This does not assume anyone becomes frozen in one quadrant; mobility across quadrants over time is perfectly possible, and as Thompson *et al* (1990) have argued, people will migrate across quadrants when one way of life, and the social relations that characterize it, is seen to be no longer viable, undermining the values that have sustained that position.

The discursive equivocation of the programmes policy, and the absence of key complementary policy measures (like the promised – but delayed – revised funding

formula: see Bunting, 2002b: p. 134) has meant that considerable leeway existed for local interpretation of the policy, and divergent interpretations are indeed evident, both across and within institutions. This looser interpretive space may mean that there was more room for a greater diversity of regulative orientations amongst academics to be exercised in the implementation process, and thus the (limited) phenomenon of policy compliance may signal a small constituency of academics who are investing in changed 'ways of life'. If this were to be the case, the dispositions and experiences of such academics would be of interest to those who study institutional adaptation.

As I have shown, Mary Douglas has introduced a generic template to understand culture in relation to social structure, and we have seen how Maassen has used this template to discuss academic 'ways of life'. Douglas' framework has, moreover, been adapted for educational contexts by Bernstein, where he offers more specific theorizations about the connections between pedagogy, social relations and identity. Consequently, I will now introduce Bernstein's discussion of pedagogic identity, especially his elaboration of positions which can be understood as broadly analogous to Douglas' individualist and egalitarian positions, which Bernstein refers to as the market and therapeutic identities. This will enable the identification of more specific characteristics of these identities as they find effect in education more generally, and in higher education specifically.

Although there are valuable affinities between the typologies identified by Douglas and Bernstein, they should not be seen as deriving strictly from one another. Inevitably, as typologies are constructed for increasingly specific purposes, the axes of variation will address specific particularities of context and the ideal-types that are yielded will vary accordingly. The value of tracing the antecedents of more specific typologies, however, lies in illustrating the theoretically-embedded nature of the construct and its relation to wider traditions of social theory.

3.2.1 Bernstein's typology of pedagogic identities

Bernstein distinguishes between two 'official' identities projected by the discourse of the state, and two 'local' identities generated within institutions, particularly where these institutions (like the two universities in this study) have a degree of autonomy.

The two **official** pedagogic identities are the retrospective, and the prospective. *Retrospective* identities (perhaps broadly similar to Douglas' 'hierarchical' way of life in their respect for the ascribed or positional identities characteristic of long-established and institutionalized groupings) are "shaped by national religious, cultural grand narratives of the past ... appropriately recontextualised to stabilise that past in the future". Importantly, notes Bernstein, the discourse of this identity "does not enter into an exchange relation with the economy. The bias, focus and management here leads to a tight control over the *inputs* of education, that is its contents, *not* over its *outputs*" (1999: p. 248). By contrast, the *prospective* identity is essentially forward-looking, and is oriented to deal with cultural, economic and technological change, and is usually motivated by the need to maintain or improve economic performance. Because of this emphasis on economic performance, the promotion of these identities "requires the state to control both *inputs* for education and *outputs*" (*ibid*: pp. 248-249). An argument might be made that the prospective identity has affinities with the 'fatalist' way of life in Douglas' terms, in that the constraints – and rewards – associated with membership of traditional institutions, or 'groups', are foregone in the search for flexible responses to change, while something of the value systems of the past, or 'grids', nevertheless endure as guides for behaviour. This particular affinity between the ideal-types is, however, somewhat harder to sustain.

Bernstein calls the two **local** identities, which can be generated within reasonably autonomous institutions, the therapeutic and market positions, which have somewhat closer affinities with Douglas' 'egalitarian' and 'individualist' positions respectively, as is evident in Bernstein's account of them. Whereas the two official identities distinguished above recontextualise various resources from the past, these two local identities are concerned with the present, although different versions of the present. With the *market* identity, the institution shapes its pedagogy and management to produce products which have an exchange value in a market. Management tends to be explicitly hierarchical, and acts to monitor the effectiveness of the components of the institution in satisfying and creating local markets, and to reward and punish accordingly.

> We have here a culture and context to facilitate the survival of the fittest as judged by market demands. The focus is on the short term rather than

> the long term, on the extrinsic rather than the intrinsic, upon the exploration of vocational applications rather than upon exploration of knowledge. The transmission here views knowledge as money. And like money it should flow easily to where demand calls.... [This] position constructs an outwardly responsive identity rather than one driven by inner dedication. Contract replaces covenant.... The [market] position projects contingent, differentiated competitive identities. (*ibid*: pp. 250-1)

By contrast, the *therapeutic* position emphasizes "an integrated modality of knowing and a participating co-operative modality of social relation". Compared to the competitive identities of the market position, this position projects (ideally) stable, integrated identities with adaptable, co-operative practices: "the management style is soft, hierarchies are veiled, power is disguised by communication networks and interpersonal relations" (*ibid*: p. 251). Bernstein notes that the pedagogy of this position (because of its collaborative and student-centred approaches) is relatively costly, and that this identity position is sponsored by a social group with relatively little power.

3.2.2 An analytic framework for studying academic identity change

The ambivalence (noted earlier) found in the South African policy texts is not limited only to this context. Muller, for example, notes that the field generally moves between on the one hand "an autonomous performance model" which he likens to the "curriculum of the past", where learners are subject to the regime of disciplinary subjects and on the other hand a market-oriented model which emphasizes "skilling tailored to specific needs, tasks and slots in the increasingly labile occupational hierarchy" (Muller 2000: p. 105). As noted earlier, Ensor similarly suggests that the South African curriculum policy texts have featured the opposing influences of (along one axis of variation) a inward-looking disciplinary discourse and an outward-looking credit-accumulation-and-transfer discourse (Ensor 2002: p. 274) and these two map broadly onto Muller's categories, She also notes two further discourses, in her view somewhat weaker in influence, which are respectively a professional discourse (which faces outwards towards the physical, natural and social world) and a therapeutic discourse (which is also of an inward orientation, but which focuses on the fulfillment of the inner competence of the individual). In her schema, which is, of course, adapted

from Bernstein's typology outlined in section 3.2.1 above, Ensor associates the disciplinary and professional discourses with (her other axis of variation) relatively low levels of student choice over curriculum, and the therapeutic and exchange discourses with higher levels of student discretion in this regard.

It is here that I would like to propose an alternative schema to Ensor's, one that serves the purposes of the study at hand and thus reflects the aspirant identity dispositions of adaptively-oriented academics in the *formative* disciplines (the humanities and natural sciences, as opposed to the professional disciplines), and particularly as these are reflected in their responses to *curriculum restructuring policies*. Four broad dispositions are identified as a result of an extensive conversation between the theoretical antecedents (outlined above) and the data generated for this study (discussed in Chapters Six to Nine). These dispositions are respectively a non-adaptive, traditionalist disposition, and three adaptive dispositions which I call the pedagogic, the market and the cognitive dispositions.

To formalize this typology, and to distinguish the positions from each other, I have generated axes that draw on two key vectors of change which circulate in the policy discourses: a pressure to modify the *discursive order* (or content) of the curriculum, and a pressure to modify the *social order* of the academy, either through cross-border teams within the academy, or through relationships between the academy and the outside world. These four ideal-type dispositions can characterized as follows:

Traditionalist:[11] This orientation retains a commitment to the traditional discursive order of curricula which are derived from the ordering of knowledge and other cognitive priorities within individual disciplines. Similarly, this orientation remains committed to the traditional social order of discipline-based subject departments, and will owe allegiance to the epistemic community associated with his or her disciplinary specialism. This disposition tends to resist suggestions that the traditional discursive

[11] It is difficult to find a term to represent this orientation that does not carry some pejorative resonance. Other terms I have come across include 'insular' or 'cloisterist', which also seem to carry negative connotations. I have chosen to use the term 'traditionalist', and may use the term 'insular' to refer to this inward-facing and autonomous disposition, but do so without <u>any</u> intention to convey a judgmental or pejorative meaning. The intention of this study is to map the aspirant dispositions of academics as objectively and respectfully as possible, and without suggesting that any orientation is more or less desirable than another.

order should primarily serve interests outside the discipline, instead seeing the interests of students or the possibilities for the application of knowledge as necessarily following the primary priority which is the production of knowledge within the discipline. For this reason, the subject department and the epistemic community remain the primary social groupings. This disposition may manifest as non-adaptive (resisting participation in change) or may manifest as responding adaptively to strengthen then traditional order, where this is perceived as having been weakened.

Pedagogic: This adaptive disposition seeks primarily to modify the discursive order of curricula to serve the interests of students, often aiming for a shift from text-centred to student-centred or problem-centred pedagogies. The principles governing the order of the curriculum thus shifts from those derived from the ordering of knowledge within the discipline to those aimed at maximizing the fulfillment of the learner's potential or the production of 'skills'. The social order is only secondary to this priority, and if cross-border connections are pursued, it is to secure the primary objective of the internal re-ordering of knowledge according to pedagogic, rather than disciplinary principles.

Cognitive: This adaptive disposition is generated from cognitive commitments arising from the disciplinary socialization of the individual, usually involving hybrid or regionalizing knowledge areas, which have an inherent inclination to seek affinities with neighbouring knowledge fields. The disposition seeks to weaken the strong traditional insulations of disciplinary boundaries in order to affirm and deepen these cognitive commitments, and thus advance the interests of the individual academic by contributing to his/her research focus or by establishing his/her specialism in the curriculum. The disposition thus seeks to modify the social order (relations across departmental boundaries) in order to fulfill an existing hybrid cognitive interest.

Market: This adaptive disposition seeks to modify the traditional discursive order of the curriculum by responding to the signals of constituencies outside the academy. Changing the discursive order thus depends on establishing a relationship with the external constituencies so that curriculum principles can be derived in a dialogue between the parties. The disposition seeks to construct a discursive order that will produce graduates who serve the interests of the external constituency, and thus the

traditional boundaries between the academy and the outer world (and sometimes the boundaries within the academy itself) need to be radically weakened. This disposition may be propelled by pragmatic motives, either because material or status interests are involved, or because survival depends on it, or by motives of development and social equity as in the service learning movement.

These ideal-type dispositions are represented in diagram 3.1 below:

Diagram 3.1: Aspirant identity dispositions of academics in the formative disciplines

Discursive Order / **Social Order**	**D+** **Changing Discursive Order** **D-**	
S+ **Changing Social Order** **S-**	Traditional	Pedagogic
	Cognitive	Market

In summary, the orientations or commitments which distinguish these identity dispositions from one another are thus varying stances towards disciplinary discourse in the curriculum (a commitment to an established discursive order, or an aspiration towards a changed discursive order), and the orientation towards academic social relations (a commitment to existing department- or discipline-based social relations, or an aspiration towards social relations across traditional boundaries). The former dimension I have called *discursive order*, represented by the codes *(D+ or D-)*, and for the latter dimension of social relations, I use the term *social order (S+ or S-)*. I will use these dimensions of variation to identify the differing dispositions or aspirant dispositions projected by respondents during interviews, attributing values to utterances as follows:

D+ Supports existing discipline-based discursive order

D- Supports a changing discursive order

S+ Supports continuing strong classifications of existing social order

S- Supports a changing social order

The identity positions noted above would thus have the following D and S values:

Traditional	(D+, S+)
Pedagogic	(D-, S+)
Market	(D-, S-)
Cognitive	(D+, S-)

In diagram 3.2 below, I illustrate each of the values with data excerpts:

Diagram 3.2: Coding values illustrated with data excerpts

CODING VALUE	DATA EXAMPLES
D+ (Supports the existing, discipline-based discursive order)	1. You could spend an awful lot of time fussing around 'coherence', but the more important idea is that each ***segment*** of it is well done, at undergraduate level. ... At the end of the day, I don't think that it really matters too much ***what*** undergrads do, especially in the Arts and Social Sciences, so long as what they are doing is of reasonably good quality. I'm not sure you can compensate for indifferent teaching by talking about 'coherence' or whatever else. (AH12: pp. 1-2. Respondent's emphasis) 2. Students at [UniA] are spoonfed. That is, they are given course readers instead of being encouraged to search for materials on their own as part of the learning process; they are encouraged to rely on lecturer notes (provided through overheads) and the readings provided by the lecturer rather than independent reading. ... My own conviction, based on my experience, is universities do not teach: they merely throw a challenge to those involved in the learning process. It is up to the students to take up the challenge and swim in the ocean of knowledge. (BH19a: pp. 1-2) 3. Are we dumbing down to meet the students' demands for a good grade effortlessly achieved? ... I would leave much more to their initiative even at the risk of the weak ones going under. (BH25: p. 1)
D- (Supports a changing discursive order in the	1. You have to accept that in the end it is not getting people a degree or a diploma or a certificate, just to develop his or her potential fully, like it has been framed in the past ... but a more significant part of the objective of the training would then be to transfer concrete and practical skills. (AH11: p.7) 2. I think what appalled me was the inability of someone in this

curriculum)	university to say that we *can* make people who are not numerate, numerate and this is how we can do it. If you want that to happen in your programme, this is the time you have to give to it, this is the staff you will need. ... If you say that they must be able to read graphs and they must be able to do ratios and stuff like this, this is what needs to be in place. (BH18: p.11. Respondent's emphasis)
S+ (Supports continuing strong boundaries of existing social order)	1. [There] is the problem of management if you like. You know, not only did programmes have no specific administrative resources, but they don't have a formal structure for authority and responsibility, which means that anyone can do what they like really, which in some ways is okay, but in other ways it means it is difficult to plan a coherent programme or, again it comes to the question of *who* decides what a coherent programme is. You know when you try and pull together people from many different disciplines, oddly enough what they want to do is teach their discipline. ... And I think this happened quite a lot with the programmes you know. Whoever turned up at a meeting, put things together, you know, which is not an academically responsible way to put things together. I mean there are the people who went to as many meetings as possible and are willing to do things and in some ways that is good from their part, but in broader terms, in fact it's academically irresponsible for things to be put together in such a haphazard way ... that make it more of a hodge-podge than even before. ... you don't really have a basis for making decisions, apart from who happens to turn up at a meeting. (BH2: pp. 6-7) 2. Firstly I have learnt how to run the meetings. [I arrive] at the meeting with a lot of the issues settled with various people outside of the meeting and basically pre-empting other people's agendas, which we managed to do on about two occasions, knowing that they would arrive with an agenda. We pre-empted them by going around and organising a number of things, put things in place, and when they walked in, we had a new document on the table which they hadn't seen, which kept them on the wrong foot most of the time. ... It was hugely complicated, very emotional at times. (BS10: p.10)
S- (Supports a changing social order, across traditional boundaries)	1. *(Across inner boundaries:)* One has also got to take into account the changes that have taken place in the Faculty over the years with younger people moving in. I gather that, before, [the other department's] disciplinary boundaries were quite strict, ... they were not that eager to reach out towards other disciplines. ... But I think with younger people moving in, coming from ... a different kind of intellectual sphere generated over the last fifteen or twenty years, they are more outward looking. ... We are speaking of working together with them on [a project with] some of the [local] communities, with farm workers, and exploring the possibilities of narrative. And we'll be able to come in from the side of literature,

	helping them explore the possibilities of using narrative as a way of formulating experiences, working through trauma, or whatever. (AH4: pp. 6-7) 2. *(Across inner boundaries:)* I found it very exciting that we were going to get people from [another department] to work with us. ... It was incredibly amiable and really exciting. ... It was the first time that we co-operated so closely with another department. ... Probably the most exciting part of the programme thing is the possibility of working with other departments and getting out of your own little mould. (AH3: pp. 4, 6, 7) 3. *(Across outer boundaries:)* I asked Ken Owen [*a prominent South African newspaper editor*] - he came and talked to my first year class - I said, "What do you want when you take someone as a reporter?" Ken said, "I want someone with a degree in English and History." ... Stan Sacks at Radio 567, when they had the launch, I said, "What are you looking for from a media student?" and he said, '"Give me someone who doesn't have any ideas." The paradox is that they don't want someone with all the answers. They want people who are critical and innovative and wide ranging. So what is the great thing about coherence? I went to the media industry, I asked, and I came back and said "Guys, they don't actually want [programmes like] this." (BH3: p. 12)

I will be combing the transcripts for commitments from respondents to stable or changing forms of discursive or social order, and any motivations (moral or intellectual) that may be advanced to support such orders. Indicators which might suggest these differing dispositions are likely to be found in respondents' varying projections about the role of the university, the priorities for research, models of pedagogy, and the mode of governance within institutions. There may be varying views on who should gain legitimate access to university education, which forms of knowledge should be prioritised in research, who may be natural partners in the knowledge enterprise, the extent and limits of autonomy, the appropriate avenues of accountability, and theories of pedagogy. In Chapter Four, I will discuss in more detail the complexity of assigning codes to data, using an example of transcript text.

Although the framework outlined above finds its genesis in the theoretical work of Douglas and Bernstein, and the empirical work of Maassen and Ensor, it has travelled a little distance from these antecedents and is designed to serve the purposes of the

study at hand. It is important, at this point, to note the affordances and limitations of a framework like the one developed above. This typology aims to identify and distinguish regularities in the responses of academics at a time when the traditional order has been destabilized, aiming to establish ideal-typical groupings of academics who seem inclined towards adaptive behaviour when many of their colleagues are not. To do this, the typology cannot afford to rely entirely on the terms of the explanations offered by the respondents, for then the account would be limited to the local categories of the time, and would be likely to make little contribution to a wider understanding of these phenomena. The tradition of the two-dimensional typology (like Douglas' grid/group formulation) enables the reduction of social variation to only a few grand types, and this is both its strength and vulnerability, since each type "generates necessarily its own self-sustaining perceptual blinkers. The fewness of the types is the encouraging simplification", which enables the analysis of "the intellectual strategies in the clash of will that gives rise to society" (Douglas, 1982b: pp. 2-3). Defending the use of typologies against the criticism that they "allow anything to be fitted into their boxes", that they become "an over-powerful interpretive tool", Douglas offers the following riposte:

> If we eschew explicit typologies which can be criticized and improved, we may stay in a celestial harmony and escape from having to deal with the relation between mind and society, but the cost of our private purity is to expose the whole domain to undeclared, implicit typologies. Either way, behaviour is going to be fitted into boxes. (*ibid*: p. 2)

There are, however, important limitations to the method, and I draw here on Ostrander's (1982) discussion of these issues. Most importantly, the typologies must be understood as a relative rather than an absolute tool, with its dimensions constructed of continuous rather than dichotomous variables. The axes that construct the four quadrants indicate a continuum of variation, and are primarily of heuristic value to enable relative comparisons within a particular context. Further, the dimensions of variation chosen for this typology (discursive and social order) are not the only ones that could have been chosen. These particular ones have been selected to suit the focus of interest of this study, which is in the motivations underlying the apparently adaptive response of some academics to policies which exert pressure on traditional intellectual and social autonomies. Finally, it is important to note that

locating any individual within such a typology is an assessment based on projections provided at a particular point in time, and in relation to particular professional issues. The classification does not intend to sum up the totality of an individual's complex disposition, nor does it suggest that her or his professional stance is unchanging. Indeed, as the case studies show, the aspirations of several academics interviewed for this study appear to be transitioning between positions on the typology, and this travel is to be expected.

3.3 Forms of Academic Social Organization

Since the policy seeks to modify the traditional order of curriculum organization, and noting Bernstein's earlier point that integrated codes can only be sustained if staff are involved in a strong social network with high degree of ideological consensus, it is important to consider two key characteristics of forms of social organization that contribute to their cohesion and sustainability. The first characteristic is the *degree of institutionalization* of the community, or the extent to which the organization of the community is (or is not) formalized in a bureaucratic structure which distributes resources, or which has an institutional life beyond the vicissitudes of its constituent members. To illustrate this, the diagram below maps out some of the organizational forms characteristic of the academic context, using as the horizontal axis the earlier distinction between insular and connective forms of association, and having as the vertical axis the distinction between institutionalised or bureaucratic organizational structures and more informal structures:

Diagram 3.3: Organizational forms in universities

Organizational Forms	**Insular**	**Connective**
Bureaucratic/Formal	Departments	Institutes
Informal	Epistemic networks	Project networks

In the diagram above, epistemic networks are the (often) international networks of academics formed through commitments to particular specialisations within disciplines; such networks seldom co-incide with the formal structures of subject departments which typically bring together a range of specialists with differing epistemic priorities within a disciplinary field. Project networks, however, bring together different specialisms in the interests of an overarching endeavour; the formal institutionalization of such a grouping typically takes the form of an institute.

The second key characteristic is that of *ideological consensus*, or the degree to which members of a community share similar frames of reference about issues central to the focus of that community. In the university sector, these issues may be to do with disciplinary knowledge, with pedagogy, with the purposes and methods of interdisciplinary projects, etc. Thus each of these organizational forms (noted above) may be more or less ideologically coherent, depending on the degree to which crucial frames of reference are shared by its members.

In the case of subject departments, a weak consensus may be compensated for by the strength of the disciplinary identities, the institutionalised organizational form and the role it plays in distributing resources. The generally weak institutionalization of epistemic communities is counterbalanced by a strong primary disciplinary identity and the ideological coherence manifested in the common literature and methodology

of the episteme. But a project network that is informally organized and which fails to achieve or sustain the ideological consensus needed for the connective project may thus provide a weak reciprocal social base for the values and practices needed to sustain the identities of its participants.

The case studies which follow consider the relatively rare examples of attempts to construct informal inter- or multi-disciplinary organizational forms in contexts where formal disciplinary organizational forms are the norm. The study explores the varying identity projections articulated by the academics during the course of curriculum restructuring, considers the social and ideological coherence of the groupings that emerge, and assesses the extent to which new and sustainable forms of adaptive social association are emerging in these contexts.

3.4 Conclusion

To provide a conceptual frame for the study, I began by drawing on the work of Basil Bernstein and the conceptual language he has developed to talk about curriculum, and the social relations associated with differing modes of curriculum. He has noted how a shift from collection-type to integrated-type curriculum has consequences for authority and for the pattern of allegiances of staff, with traditional loyalties to disciplines needing to be adapted to an allegiance to a connective project. Bernstein warns that the integrated type can only be sustained if staff are involved in a strong social network with a high degree of ideological consensus.

To conceptualise the changing forms of social organisation represented by the programmes policy injunction, I have drawn on Mary Douglas' typology of 'ways of life', and I have adapted Maassen's use of this typology in the higher education context. I have suggested that the divergent discursive trends noted in the policy texts could be seen as mapping broadly onto the 'ways of life' that Douglas has characterized as hierarchical, individualist and egalitarian, and that the policies seem to urge a move from the traditional hierarchical position towards either an individualist position (maximising market-related entrepreneurialism) or an egalitarian position (emphasizing collaborative relations). I then draw on Bernstein's work, since his typology of pedagogic identities has affinities with Douglas'

framework, and provides a description of the features of these identities in pedagogic contexts. Seen through Bernstein's terms, the shift would be understood as moving from retrospective, elite identities (which I have called 'disciplinary' identities) towards positions which Bernstein has characterised as 'market' or 'therapeutic' identities. I have modified these terms for the purposes of this study, using the terms 'market' and 'pedagogic', and have added a further type of adaptive identity which I've called a 'cognitive' disposition. These differing orientations become evident through varying commitments to stable or changing discursive and social orders. In the following pages, I set out to examine the extent to which these varying identity dispositions are evident in the accounts given by academics involved in instances of ostensibly substantive compliance with the programmes policy.

The next chapter discusses the design and methodology of the study.

CHAPTER FOUR: GENERAL METHODOLOGY

> Interpretation cannot be separated from the grounds which make it plausible. (Bernstein & Solomon 1999: p. 278)

This study focuses on the adaptive capacity of higher education institutions by examining the identity projections and value systems articulated by academics who seem disposed towards complying with a curriculum restructuring policy which could be seen as encroaching on their traditional autonomies. The purpose of the study is thus to understand the motivations of a relatively small minority (in the contexts under study, anyway) of compliant academics who appear to differ from the majority of their colleagues who have tended to resist or evade the policy, or have complied with it only rhetorically rather than substantively. The study aims to see whether the apparent compliance of this minority represents a shift in the traditionally insular identities and value systems espoused by academics towards the connective values and orientations suggested by the policy. Further, the study aims to understand the experience of these adaptively-disposed academics within their broader institutional settings, given that such settings may be characterized by diverse orientations and organizational arrangements.

In the previous chapter, I outlined the conceptual frame used in this study to discuss academic identity, as well as the specific analytic tools to be used for identifying data. In this chapter, I build the argument for the case study design used in this project, drawing extensively on Yin's (1994) influential work in this area, as well as the logic for the interviewing methods used. The common validity concerns which attend these particular methods are considered, in particular the difficulties associated with interpreting interview data, and the measures used to address these concerns are discussed.

4.1 Design of the study

The study begins with an assumption that shifts in the discursive and regulative order of academic work suggested by the policies would be most challenging to traditionally-configured institutions, but that evidence of such shifts in traditional institutions might suggest a more significant sea-change in academic values and orientations than if they were to be found in institutions with strong track-records as applied-technology institutions, or as primarily teaching institutions. In such institutions there may not be such strongly introjected, discipline-based orientations, and they may thus be more amenable to the reforms suggested by the policy. This study is, instead, interested in adaptive behaviour in universities oriented towards discipline-based, basic research, or institutions which constitute the 'elite' stratum in a South African higher education system faced with strong pressures for transformation. Further, the study focuses on those faculties for whom the policy of programmatization represents the most radical departure from established curricular practices: the faculties of the natural sciences, and of the humanities, where the emphasis on basic research, and the tradition of individual autonomy as teachers, are most deeply entrenched, in contrast to the professional faculties which have long been accountable to professional bodies for their curricular practices.

Since the interest of the study is in any adaptive orientations that may be emerging from traditional academic contexts, the design of the project involved identifying two 'elite' institutions which had both undertaken strong management-driven adaptive projects in the form of curriculum restructuring exercises, so as to enable comparison across the sites of adaptation (see Chapter Five below for a fuller discussion of the similarities and differences between the institutions under study). The comparative perspective will enable a clearer view of the distinctive features emerging in each setting as well as any regularities which might operate across the sites. Although the primary unit of analysis is the identity orientation of individual academics, this unit of analysis is 'embedded' within another unit of analysis, that of the programme-based grouping (see Babbie & Mouton, 2001: p. 282, and Yin, 1994: pp. 38-52, for discussions of embedded case study design). It was predicted that there might exist divergent orientations within any single grouping which could complicate the collaborative venture, and how such divergences are managed would be an interest of the project. Further, the study is interested in any dynamics that might arise from the location of substantively adaptive programmes groupings in contexts where responses

to the policy had otherwise been rather more pragmatic. The primary interest is thus in the dispositions of individual academics centrally involved with substantively compliant programme groupings, with a secondary interest in the social relations and division of labour that operate within such groupings, and between such groupings and their institutional contexts.

A case study approach to the project has consequently been adopted for the broad design, with the intention of identifying a number of apparently adaptive programme groupings, looking as far as possible for comparable programme counterparts in each institution, covering both the natural sciences and humanities. The case study method enables an examination of 'embedded' identity, or in other words the exploration of both individual and collective motivations and experiences within the changing site of practice represented by programmes. The structure of the study is thus, in Yin's (1994) terms, a multiple-case, embedded design.

It was thought at the outset that the field of study was one predictable variable (amongst many unpredictable ones) that may have a significant conditioning effect on the programmatization process, and that the design should aim to bring such patterns to light. In selecting the multiple cases, the objective was thus to try to identify:

a) cases which have similar features (in this instance similar fields of study), and which aim to achieve what Yin calls *literal replication* or similar results, and
b) cases which have differing features (differing fields of study, i.e. science and humanities), aiming to achieve *theoretical replication*, or predictably contrasting results.

As Yin notes, this multiple-case design (as opposed to single-case designs) "is often considered more compelling, and the overall study is therefore regarded as being more robust" (*ibid*: p.45) because the view across cases enables the 'replication logic' of similarities and differences to become evident, strengthening the 'external validity' of the case study method (*ibid*: p. 33).

The central body of data for this study consists of eight case studies drawn from the two institutions, arranged in four comparative pairs. The case studies have been selected in order to serve various purposes: firstly, to explore instances where claims

had been made (usually by senior management figures) of *significant*[12] restructuring of curricula, or of significant cross-boundary collaboration between academics from differing disciplines. These instances were sought to contrast with the widespread phenomenon of departments and academics responding highly pragmatically to the programmes policy by re-packaging their existing curricula under a rhetoric of conformity, and effectively maintaining the strong insulations between disciplines. Where strong claims were made for such reforms in the case of a programme in one institution, I sought a counterpart programme in a similar field or area of study in the other institution to stand as a comparative example, either to confirm or contrast any patterns that might emerge (in Yin's terms, to seek literal replication). This was to explore the possibility that the field of study might be a significant variable shaping the responses of academics in these contexts. A further intention governing the choice of case studies was to include examples from both the broad humanities (including social sciences) on the one hand, and the natural sciences on the other hand. This was for two reasons: firstly these disciplines were the ones most affected by the programmes policy (the professional faculties often considered their curricula to be 'programmatic' already); secondly, the interest was whether the differing knowledge structures typical of the respective faculties (typically 'vertical' in the natural sciences, and 'horizontal' in the humanities [Bernstein, 2000]) would play a role in conditioning the cross-boundary negotiations entailed in the restructuring exercise. In other words, in fields of study in the natural sciences where vertical knowledge structures are characterized by greater unanimity, would the processes of cross-boundary negotiations be easier than in the humanities, where the horizontal knowledge structures are inherently more contested?[13] This contrast would enable what Yin calls theoretical replication.

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[12] In the event, 'significant' compliance turned out to be a contextually-relative judgement, depending firstly on the interpretation of the notion of 'programme' in each institutional context and secondly on the differing levels of reconstructive rigour that were applied to the Science and Humanities Faculties respectively (see Chapter Five below for an account of the respective institutional contexts). What was considered by senior management figures as significant restructuring in the Humanities Faculty at UniA would have been seen as insufficiently restructured for a Humanities context by their senior management counterparts at UniB. In both institutions, more rigorous criteria were applied to the Humanities programmes than to the Science programmes. These variations across institutions and faculties only became clearly apparent once the final phase of data-gathering was underway.

[13] In her recent work which relates differences in teaching and learning practices to the distinctive characteristics of different knowledge fields, Ruth Neumann (drawing on Becher's (1989) hard-soft, pure-applied typology of disciplines) notes that collaboration in teaching across disciplinary boundaries is more of a feature in hard and applied disciplines than it is in soft pure disciplines. She accounts for this (drawing on Lattuca and Stark, 1994) by arguing that the hierarchical accumulative nature of the

The structure of the case study pairs is as follows (the asterisk indicates which of the pairs was first identified as substantively compliant):

Humanities:

1. **UniA:** *Humanities*
2. **UniB:** *Cultural and Literary Studies**

3. **UniA:** *Development and Environment*
4. **UniB:** *Development Studies and Social Transformation**

Natural Sciences:

5. **UniA:** *Biotechnology**
6. **UniB:** *Biotechnology*

7. **UniA:** *Physical and Mathematical Analysis**
8. **UniB:** *Industrial Mathematics*

In the event, it was not finally possible to select exactly matching counterparts from each institution, especially in the humanities, because of the differing interpretations of 'coherence' that were finally settled on in the respective institutions, and the differing disciplinary configurations that were established in each case. The disciplinary match is perhaps least well achieved in the first pair above, and best achieved in the *Biotechnology* programmes. In spite of this, the pairs do offer some opportunities for comparison through literal replication based on similar disciplinary fields, and ample opportunity to explore contrasts through theoretical replication

knowledge structures in hard pure disciplines enable a common paradigm on which academics can agree, and which enable conversations about curricular coherence (Neumann, 2001: p. 139). By contrast, the horizontal knowledge structures typical of soft pure disciplines, where multiple paradigms often evolve in explicit critique of one another (Bernstein, 2000), do not facilitate easy agreement on what is to be prioritized in curricula. The effect of the differing knowledge structures is that curriculum content in hard pure disciplines tends to be more stable relative to the "more free-ranging" soft pure disciplines (Neumann, Parry & Becher, 2002: p. 408). In this way the gregariousness of the hard pure and applied disciplines, and the solitariness of the soft pure disciplines, extends to educational as well as research practices.

based on differing disciplinary fields. Predictably, the programmes where most connective activity seems to have occurred tend to focus on regionalising fields of knowledge, rather than on singulars (see Section 3.1 above for a summary of Bernstein's, 1996, use of these terms), i.e. fields such as Film Studies, Development Studies, Biotechnology and Industrial Mathematics.

These cases are *not* selected in order to constitute a representative sample to enable generalization to a wider population; instead the purpose is to generalise to the theoretical issues motivating this study (Yin, 1994: p. 10), that is to examine the motivations and conditions underlying instances of apparent compliance to exogenous policy. Each case study should be revealing in its own right about the dynamics of compliant curriculum restructuring in a particular context, and the comparative view made available through the pairs of counterpart programmes helps to show where these dynamics may be contingent upon disciplinary characteristics, the particularities of context, or other factors. The synoptic view across all eight case studies, however, enables the emergence of a set of regularities and contrasts which address the theoretical frames of reference invoked for this study. A different, and much broader study would be needed for any generalization that could be applied to the wider academic population.

4.2 Methodology of the study

4.2.1 Interview methods and validity measures

Given that the goal of the study is to explore in some depth the values and attitudes of academics, the principal method of generating data for this study was through interviews conducted with a range of academics. Altogether, ninety-five interviews were conducted with eighty-two informants at various levels in the two institutions under study, including deputy vice-chancellors, Deans, Programme Convenors, lecturers, educational development staff and some administrative staff. The data reflected in the case study chapters, however, are based on the interviews conducted with 36 respondents most closely involved with the eight case studies finally selected for inclusion in the thesis (See Appendix Three). Data from interviews with a further six respondents are reflected in Chapter Five ('Institutional Contexts'). Although the

case studies are based on data from respondents closely associated with the programmes in question, my understanding of the respective contexts, and the issues, was nevertheless significantly informed by the other interviews.

This source of data was supplemented by various forms of documentation, including the formal public documentation of the institutions (calendars, faculty handbooks, promotional material), the formal administrative documents (institutional policies, circulars, minutes of meetings) and less formal material, (e.g. copies of e-mail exchanges). (See Appendix Four)

I made use of semi-structured (or what Cohen & Manion (1994) call unstructured) interviews, where I encouraged informants to construct their own extended narratives of their experience of (and stance towards) the programmatization process, and thus provided an opportunity for the priorities and evaluations of respondents to be articulated. However, in order to maintain some consistency across interviews ('reliability' in Yin's (1994: p. 33) terms), I followed an interview protocol in which I introduced the project and its purposes, and my identity, in consistent ways, and I made use of a consistent set of questions (see Appendix 1) to ensure that the same essential areas of focus were covered in each interview. The nature of my researcher identity was a particular issue at UniA (the Afrikaans-medium institution – see Chapter Five), where it became apparent that many respondents assumed that my research involved an *evaluation* of their programmes against some sort of ideal, and it became important for me to work against this assumption in order to elicit the accounts I needed for the study. This problematic assumption did not seem to arise at UniB, the English-medium institution.

The widely-recognized virtues of the unstructured or semi-structured interview in generating rich narratives (see for example Cohen & Manion, 1994: p. 273) are, however, constrained by concerns about the validity of data thus generated. These concerns include the potential capacity of the respondent to present misleading information, or of the interviewer to skew responses in particular directions by means of directive cues (*ibid*: p. 281). Further, and more importantly for this project, many studies have shown what appear to be variations in the accounts given by respondents (e.g. Potter & Wetherell, 1987), where one part of an interview appears to contradict

another part, or a subsequent interview. It is thus necessary to present a view of the practice of interviewing, and what legitimately may be distilled from it.

Kitwood (1977) has argued that, rather than seeing interviews as a means of uncomplicated information transfer, or even as a transaction characterized by inevitable bias, they should instead be understood as an encounter that is no different from other forms of everyday practice, and thus needing to be theorized in similar ways. In this view, it is acknowledged that the quality of data presented in interviews may well be conditioned by issues of social identity, trust and any number of contingencies influencing the specific context of an interview. Both the interviewer and the respondent will be selective in what they advance in the encounter, and interpretations, both within the interview and subsequently, are likely to vary (Cicourel 1964; Cohen and Manion 1994). This variability in accounts, argues Potter & Wetherell, is a predictable phenomenon arising from an understanding of how differing contexts evoke differing discursive responses:

> A high degree of variation in accounts is a central prediction of the discourse approach: widely different kinds of accounts will be produced to do different things. On the other hand, considerable consistency must be predicted if participants are producing their language in the light of sets of attitudes which are stable across different contexts. (Potter & Wetherell, 1987: p. 54)

In developing an approach to interpreting interview texts, I draw on Bourdieu's concept of 'habitus' (Bourdieu & Wacquant, 1992), and the related idea of the differing forms of capital which constitute the habitus of members of a field in ways that enable us to perceive regularities across these groups as well as distinctive dispositions in individuals. My assumption is that in interviews respondents will project particular dimensions of their subjectivity, drawing on (and asserting the validity of) various forms of capital at their disposal, or (to use Bernstein's 1996 terms) they will selectively recruit from their individual repertoire of identity resources, which are in turn sourced from the larger reservoir of such resources available in the field (*ibid*: p. 171). Ensor (1997) notes that in the "evoking context" of an interview, individuals will seek to "elaborate their positions", projecting perceptions and values which reflect their positioning, or their trajectory, through the field. In this context particular subjectivities will be foregrounded, and others

backgrounded (Ensor 1997: p. 252). The role of my own identity, as a researcher eliciting the interviews, is one important component of this evoking context, as I shall show below, and this has consequences for my positionality as an interpreter of data (Babbie and Mouton, 2001).

To interpret the interview texts, I adapt an approach developed by Dowling (1998), and elaborated by Ensor (1997, 1999), which draws on Dowling's theory of social activity. I draw in particular on the interpretive device he has developed for analysing text. Dowling presents an approach which identifies 'positioning strategies', where the 'authorial voice' of a text specifies a 'voice' (a social role – in my context, an academic, an academic manager, an administrator, an educational developer, etc.), and then positions that voice by associating it in various ways with practices, people or ideas presented as having positive attributes and distancing it from what could be seen as having negative attributes. As Ensor demonstrates, the accounts offered in interviews may not always be taken at face value: interviews

> ... do not straightforwardly provide windows on different worlds, be they inner or outer ones. Rather they are constituted through representations of these worlds through selective description and rediscription. Or, putting it differently, [interviewees] recruit selectively from different settings to establish their own positions. (Ensor, 1997: p. 249)

It is important, then, for the analyst of interviews to be alive to their 'constructedness', and for the projections provided by respondents to be analysed for consistency, and where this consistency is uneven, to be able to suggest an explanation for sections of the account that seem to be at odds with each other. In the example below, I illustrate where a respondent presents one position in the early phase of the interview, but seems to contradict this position during the latter part of the interview. Early in the interview, the following exchange takes place:

> RM: Can you give me some sense of what vision you have of the kind of graduate that the programme should produce?
>
> AS12: It's difficult to answer that, because what I think is really not so important. It is really what industry wants out of such a programme. Whatever I think [indistinct] unless I have gone out and had discussions with industry to find out what they truly want. Since I am not in touch

> with many of these industries, my thoughts are really quite irrelevant. ... I think the flaw in the whole argument might be that the committee didn't widely test industry to see whether there was indeed such a need. (AS12: pp. 1-2)

On first reading, this might suggest a position marked by an outward orientation, projecting the instrumental values characteristic of a market identity. Listening to the tape, this view is presented matter-of-factly, without irony, as a self-evident value. A short while later he makes further references to the "university marketing itself" (AS12: p. 3), and provides a definition of curriculum coherence as being when a programme "adds up to a tool kit" for problem-solving in the workplace (AS12: p. 5). On the face of it, it seems as if this respondent is supporting a *changing discursive order* (thus attracting a D- coding value, according to the scheme outlined in Chapter Three), where the curriculum is to be informed by external stakeholders and their principles, rather than the principles derived internally from the discipline. The fact that the respondent leads by expressing an inclination to collaborate across institutional boundaries with industry (as well as across disciplinary boundaries within the institution) suggests a connective disposition which supports a changing pattern of social relations, or a *changing social order* (which would be coded S-). The further fact that the respondent would see the changing discursive order finding its lodestar from industry would place this respondent squarely in the *market-adaptive* disposition.

But by the end of the interview, a different stance emerges, enunciated with feeling on the tape:

> AS12: ... [I]n the classic Germany of 19th Century and maybe up until sometime before the Second World War ... the German academic was the pinnacle of German society. The man might have been poor, he probably couldn't even afford an overcoat, but the Professor was certainly revered. ... But certainly the social esteem, or the focus of it, or the spotlight of it, has moved away from us. It has moved elsewhere. Maybe it is just because society has become more materialistic. It just doesn't see - Spiritual values are reserved for Sundays, maybe. That's when we admire spiritual values. The rest of it is - it's credit-based, materialistic. (AS12: p. 14)

The sentiments expressed in this section of the interview (longer than this quote above) would suggest a contrary coding to that allocated to the first excerpt above. In this case, the respondent seems to support the existing (or traditional) discursive and social orders of the academy, attracting a D+, S+ coding, suggesting a *traditional* disciplinary identity. To account for this discrepancy (an apparent initial orientation towards the market, and then a concluding dismay about materialism), to understand how different subjectivities have been advanced at different points in the 'evoking context' of the interview, we need to provide an analysis at three overlapping levels: firstly at the level of the broader institutional environment and how norms, cultures and contingencies may be conditioning responses in the interview; secondly at the level of the respective positioning of the individuals involved in the interview: especially the positioning of the respondent within the higher education field and how this may shape his dispositions; and thirdly, the dynamics of the interview itself, especially in this case the respondent's (changing) perceptions of the positioning of the researcher conducting the interview. I'll outline these various positionalities before summing up their possible combined effect.

Firstly, the institutional setting: a fuller discussion of the institutions under study is provided in Chapter Five, but suffice it to say at this point that the institutional context for the interview noted above (UniA) is one characterized by a culture of stronger hierarchical controls, and (relative to UniB, for example) a greater respect amongst academics for the authority of these hierarchies. This was a characteristic of the institution volunteered by several of my respondents from UniA, especially those who had experienced other institutions. A feature of several interviews conducted at UniA (including this one) was requests by academics for the tape recorder to be switched off at points when they wanted to disclose something they felt to be especially sensitive. Indeed in one interview I was not permitted to use the tape recorder at all. I gained an impression of an institution where critique of management and of colleagues is relatively veiled; this stands in contrast to UniB where such critique seems to be much more openly articulated.

Secondly, this academic is positioned at a senior level within his own department (he is head of department at the time of the interview), and has thus been responsible for carrying out various management-related measures in that context. Further, he is

positioned in a Science Faculty department (and physically located in an Engineering Faculty building), lessening the likelihood of his coming into contact with the discourses critical of 'managerialism' in general, or programmatization in particular, that may, for example, circulate in humanities faculties (there is no evidence of such discourses in his interview). His location in a technological discipline (Computer Science) is also likely to suggest an amenability to instrumental purposes.

Thirdly, this academic appears to be consistent with several other respondents at this institution who evidently assumed that the researcher identity conducting the interview was himself a sponsor of the discourses supporting the curriculum reform. My own institutional location is in a university that was assumed by various UniB respondents to be 'ahead of the game' in terms of the programmatization process, and the two institutions also stand in a competitive relationship with each other. I am employed in an educational development unit, and my counterparts in a similar unit at UniA are clearly identified as programme enthusiasts. Together these positionalities may have suggested to the respondent that the person interviewing him subscribed to the values and norms underpinning the reform.

At the outset of the interview, then, the respondent may have construed the interview as an encounter that would be characterised by an exchange of particular forms of cultural capital, or discursive currency, what could be called the instrumentalities of the curriculum reform. In such an exchange, the instrumental purposes and goals of the reform are foregrounded, and the expressive dimensions (consideration of the norms and values underpinning competing systems, and their respective social consequences) are backgrounded. But as the interview proceeds, the positioning of the interviewer becomes clearer, firstly, as the line of questioning includes extensive and explicit attention to the social dimensions; secondly, as I defer to his specialist authority; and, thirdly, as I ask questions in ways that distance me from the language of the reform:

> RM: And there is this term that is always associated with programmes – a programme has to be 'coherent'. Do you understand what coherence means, or what it means to you? (AS12: p. 5).

As the interview proceeds, therefore, the subjectivities made mutually available to the interlocuters widen in ways that legitimate the expressive, or values-oriented, dimensions that eventually characterise the latter half of the interview. A significant moment comes when the respondent interrupts for a moment the question-answer order of the interview and asks a question himself, which has several effects, including that of reversing the flow of disclosure, of negotiating a normative terrain[14] for the encounter, and thus of establishing a more dialogic character to the interview. In my response to his question (my last two sentences) I am summarising what he has already given me in the interview, and signalling my continuing interest in that direction:

> AS12: You can tell me, for example, would you agree – is my remark out of line when I said that some colleagues are making work for themselves in this programme construction business?
>
> RM: I think it depends very, very much on the context. I think that the context of the Humanities is possibly much more difficult than the context of the Sciences because in the Sciences, there is a logic to the knowledge structures that commands certain kinds of configurations, in the same way as the logic of a Computer Science programme is completely clear to you. It became equally clear that there was a commanding logic behind the notion of the PMA programme and everyone could see that and bought into it. But even with the PMA programme, it required an enormous amount of effort from [the convenor] to actually drive that, pull that together and draw people in and thrash things out. (AS12: pp. 9-10)

For the rest of the interview, the respondent speaks at length about conflicts in the faculty over the programmatization process, and about the growing vulnerability of an academic career, embattled on various fronts. In the course of the interview, the progress of the discussion has moved from a projection of an 'official' discourse about the new principles of curriculum construction, to a discourse of regret at the erosion of traditional academic identities and values (with which he clearly identifies).

[14] The respondent here refers back to comments made earlier in the interview when he affiliates himself with the pragmatic strategies taken in his department to adapt to the programmatization process, and distances himself from the considerably more elaborate processes undertaken by (it is implied) colleagues in the Humanities Faculty. Part of the normative freight of his question, I suspect, is to check whether his interviewer shares his pragmatism, or endorses whatever underlies the upheavals in the other faculty. The effect of my answer is to evade the normative response he invites, to provide him instead with a brief glimpse of my own frame of reference, and to return the conversation to the dynamics of his own context.

It is thus possible to conceptualise an individual projecting a complex disposition geared to multiple roles (in this case a manager, and an academic) informed perhaps by value systems that may be at odds with each other, and which are invoked by differing contexts. In the case of this interview, the evoking context evolved over time, legitimating differing disclosures, signalling differing affinities (at the outset with industry; at the end with a Humboldtian ideal of scientist), and thus projecting differing identities (first market and then a traditional disciplinary disposition). It is possible also to suggest that some subjectivities have been more deeply internalized as a consequence of longer histories and deeper investments in some positionalities than in others. In the case of this interviewee, the language used, and the preoccupations disclosed, suggest the disciplinary identity of 'scientist' appears more deeply internalized than the market orientation, but there is no suggestion that pragmatic responses to the market would be disavowed when such evoking contexts (with their discursive regimes and material consequences) call them forth. The processes of programmatization in this institution (and faculty) have not brought these two discourses, and their associated identities (primary and secondary), into sufficient conflict to create a sharp crisis for this academic, located as he is in a technological discipline. In expressing his dismay at the materialism which weakens the identity of 'scientists', the respondent does not identify his university administration as responsible for this shift (as so often happens with respondents from UniB), but instead seems to bemoan the larger trends of an era.

What are the consequences of this individual's regulative dualism for his professional comportment? During the restructuring process, industry is consulted:

> We had discussions with local industry and they told us that there was a very great need for competent programmers – it sounds obvious, really, that a Computer Science department should produce competent programmers – but that these programmers should be equipped with skills which *manifestly* made them competent programmers. (AS12: p. 7)

But the consequence of this consultation is a strengthening of the internal relations within the department, both for the curriculum, and in terms of a centralising of administrative control. The focus of the curriculum is sharpened, and its vertical

progression is strengthened, each year building explicitly on the foundations of the previous one, according to a logic internal to the discipline (thus suggesting a D+ coding). He discovers that strengthened verticality of curriculum requires a strengthened verticality of social relations in the department (suggesting an S+ coding):

> If you leave it to the colleagues to organise their own courses and their own lives, it turns out that there are problems, there are hiccups, there are mistakes being made. ... One of our senior colleagues is now – I wouldn't call him a policeman, and he certainly wouldn't call himself that – but he is now a quality assuror, or something. But he will try to make sure that what is supposed to be happening is happening. (AS12: p. 8)

But he draws on intellectual authority to fulfil this role, rather than his own administrative authority (as head of department), and appoints the department's strongest figure in the field of programming, consistent with the unifying focus of the curriculum. So, to sum up, as this individual turns his eye to the market, his interpretative response is to *strengthen* traditional disciplinarity, rather than attempt to render the offerings of the department more flexible in terms of modularization and a weakening of vertical progression of the curriculum (a response that Ensor (2002) noted in her study). The dynamic illustrated here, where academics have used the restructuring as an opportunity to re-assert primary values of the academy, is one that is repeated frequently in the data.

Thus, although we start with ideal types for our analytic categories, the process of analysis will need to anticipate complexity and hybridity in the projections presented by respondents, and interpretations will need to keep context clearly in view when drawing conclusions about the weighting to be given to some forms of data against others. The interview sketched above proved to be one of the more strongly ambiguous texts to analyse, and many others are more straightforward in their orientations, but this stands as an important exemplar of the complexity of the interpretive task.

The interviews for this project were conducted during a six-month period in 2000 immediately following the heat of reconstructive activity carried out in the prior two

years, when unusual patterns of interaction amongst academics disrupted the normal routines of institutional business, bringing academics into intensified contact with each other, and making space for the collegial negotiation of values and identities in unprecedented ways. The debates around interpretations of the policy had the effect of unsettling established value systems, bringing the old order into question and opening the space for relatively marginal interests to bid for more dominant positions in the field. The negotiation process certainly seems to have offered some individuals a glimpse of the potential rewards of cross-boundary encounters, but once the process is concluded and the system settles into a new equilibrium, the conditions to support and fulfil this dynamic in the longer run may, or may not, be sustained. It is possible therefore that the projections and values articulated by some respondents are fuelled by the discourses and energies of the time, and that these may be modified one way or another as new (or, indeed, old) practices settle into routines.

Yin suggests that key strategies to deepen the construct validity of the interpretations drawn from interview data are, firstly, to use multiple sources of evidence and, secondly, to offer respondents an opportunity to read drafts of case study reports (Yin, 1994: pp. 33-35). In gathering the data for the case studies, I aimed to identify and interview all the key agents most actively involved in negotiations around a particular programme, ensuring as far as possible that I contacted the individuals most strongly committed to the new grouping. Inevitably, I came across individuals who were involved but were only weakly motivated one way or another, or who were disinterested or even oriented against the reform but who were participating with an eye to survival. I only interviewed full-time members of the academic staff, and thus did not include part-time staff. Where high levels of conflict obtained in any particular programme setting (for example in the *Biotechnology* and *Film, Media and Visual Studies* programmes at UniB) I interviewed as many academics as possible, including those only marginally involved in the negotiations. Programmes had widely varying numbers of academics associated with them, and the number of programme-based informants for any one case thus ranged from a minimum of three (*Mathematics for Business and Industry* at UniB, and *Biotechnology* and *Development and Environment*

at UniA) to a maximum of nine[15] (*Film, Media and Visual Studies* at UniB), constituting between 80% and 100% of staff actively involved in programme negotiations. In addition I interviewed other informants who were able to give views across several cases (deputy vice chancellors, deans, academic planners, educational developers, administrators). The majority of respondents tended to be at more senior levels, with 80% of respondents being at senior lecturer level or above.

Generally, academics were willing to grant the interviews, which tended to last between ninety minutes and two hours. On only two occasions was my request turned down. In a few cases, individuals were on sabbatical, or had left the institution. Once an informant refused to allow me to tape the interview, but relented on this for a second interview. Informants were made aware that I was interviewing others from the same programme, and I asked advice about who else I should approach. A pleasingly high number took the trouble to point out individuals who would be likely to hold views counter to their own. I never came across any instance where I felt an informant set out to misinform me. At worst, some were reluctant to speak openly (especially at UniA), or were presenting 'best-face-forward' accounts. Usually, however, I found informants willing to speak at length, and often very frankly, once they (again at UniA) had been reassured over the issue of anonymity. Inevitably, some informants are more articulate about the programmes processes than others, and some case studies may thus rely more heavily on these narratives, but I have endeavoured always to present an account which is inclusive of differing perspectives, where these occur.

In this regard (and with a view to Yin's second strategy for building construct validity), I offered key respondents the opportunity to read drafts of the case studies or thesis chapters. As I worked through the data over the past three years, I drafted conference papers on the case studies (which included some of the theoretical framework) and circulated these amongst informants. In the case of the *Film, Media and Visual Studies* paper, I was able to present it at a seminar at the institution to which all *FMVS* informants (and others) were invited. In the (very sensitive) case of the *Biotechnology* programme at UniB, as a result of circulating my draft I was

[15] Only interviews with seven of the nine respondents are reflected in the case study report in Chapter

invited to play a role in a conflict management workshop held for the newly-merged department. The feedback from informants who did respond (not all did) was always useful, sometimes resulting in changes of detail, or changes of emphasis. In a few cases, I conducted follow-up interviews by telephone to clarify details or confirm trends.

I also gathered extensive collections of documentary evidence, including national policy documents, institutional policy and administration documents, official documentation concerning implementation activities (e.g. minutes and aides memoire), publicity materials, academic and media articles written about the process, and unofficial documentation illustrating 'behind-the-scenes' activities (e.g. e-mail exchanges). In the end, this mass of documentary data was used to provide insight into the respective institutional contexts of implementation (see Chapter Five), and to confirm and support the accounts given by respondents themselves. Although the documentation is itself of considerable interest, a close analysis of this had to be foregone in the interests of focusing on the primary object of study, the identity dispositions projected by the academics themselves.

4.2.2 Methods of data analysis

All of the interviews used for the case studies chapters, and for the institutional context chapter, were fully transcribed, with the remainder being either fully or partially transcribed as needed. I transcribed the first ten of these personally to acquaint myself both with the emerging data, and with the transcription requirements needed for this project. In the event, I decided on straightforward transcription conventions, eschewing the fuller notational conventions used for transcribing more complex interactional texts (like recordings of meetings or classroom activities, e.g. see Potter & Wetherell, 1987: pp. 188-9), particularly since I was not conducting a full discourse analysis of situational interactions, and also (more pragmatically) because I often needed to rely on several transcribers to produce the transcripts in a limited time. In checking the transcripts, I then inserted any descriptive observations I felt were pertinent to understanding the dynamic of the interview.

Six.

The conventions visible in the excerpts reproduced in this thesis are thus the common ones of the square bracket containing replacement or clarificatory information (e.g: "a system where you had [a language] Department following a certain approach"), the dash indicating an unfinished sentence (e.g. "What approach are they taking to conceptualise - do they start with definitions?"), and the ellipsis indicating a portion of text that has been omitted ("That's my argument. ... I think it is because of who I am").

Although I began by using a qualitative data analysis package (NVivo), in the end I found I worked better with hard copy transcripts, working with a cluster of interviews related to a particular programme, preferring the relative 'visibility' of the hard copies with my extensive handwritten notes and cross references. Since the eight case studies naturally clustered the transcripts into manageable numbers, the traditional manual system was workable under these circumstances. I listened to each interview tape at least twice, once to correct transcripts (where I had not done these myself), and once to assist in the analysis. On some occasions I returned to a tape a third time when I was trying to resolve interpretive difficulties or what seemed to be contradictions in the data.

Apart from the coding system outlined in this thesis, I also used other codings which explored additional tentative themes which, in the end, proved tangential to the project at hand.

4.2.3 Conventions used in the study

A central ethical concern of the study is to maintain the commitment to anonymity given to the respondents who agreed to participate in the study. For this reason, the institutions are referred to respectively as UniA and UniB, and the respondents are identified by a coding system which signals the institution and the faculty: for example "AS12" for a respondent from UniA's Science Faculty, respondent number twelve in that Faculty. I do not identify the department or discipline as this would in some cases enable respondents within these institutions to identify some informants. When respondents do not belong to a particular faculty (e.g. administration or educational development figures), they are given an "I" coding for "institutional" (e.g.

"BI3" identifies a senior management figure at UniB). If more than one interview with a particular respondent is quoted, they are differentiated as BI3a, BI3b, and so on. Whenever I have quoted directly from an interview, the page numbers refer to the transcripts. I realise that these conventions have a cost in terms of diminishing readability, but they are a practical solution to the ethical issue of maintaining anonymity.

No respondent has objected to the use of the programme names in the study[16]. I differentiate programme names from fields of study by giving the programme names in italics, whilst leaving disciplines or fields of study in normal font (thus the programme *Development Studies* is distinguished from development studies as a field of study). Department names are distinguished by initial capitals (e.g. Sociology).

4.3 Conclusion

In this chapter I have laid out the logic informing the case study design, and the largely interview-based method, employed in the study. Issues of validity that are routinely raised in connection with this design and method are discussed, and the measures that have been taken to address these issues are explained. In the next chapter, I outline the institutional contexts for the case studies, noting how the respective institutional cultures, and the particular interpretive differences, may have conditioned the way in which programmatization unfolded in the various sites. The following four chapters will each present a pair of case studies, before the concluding chapter draws together the threads in an analytic overview and a discussion of the implications of the findings of this study.

[16] I have anonymised the institutions, and the respondents, and considered changing the names of the programmes in case it was thought these could be used to penetrate the anonymity. In the end I decided against this, both because the names chosen for programmes were sometimes interesting in themselves (for example, the difference in emphasis in the names chosen for the mathematics-related programmes in Chapter Nine), and because no respondent ever suggested that this might compromise their anonymity.

CHAPTER FIVE: INSTITUTIONAL CONTEXT FOR THE STUDY

> Holding organizational anxiety requires [an] internal container. The internal container is provided by a culture of trust and particular patterns of power use. (Stacey, 1996: p. 189)

This chapter outlines the broad institutional contexts for the individual case studies which follow. It locates the two institutions under study within a common typology used in the South African context, identifying ways in which the respective institutions are similar, as well as how they differ, before outlining briefly the respective institutional cultures and management styles. For each institution I then go on to discuss elements of the discursive strategies used in the implementation of the programmes policy, focusing on those dimensions most relevant to this study, which is the extent to which traditional discipline-focused academic identities are under pressure to move towards adaptive identities of one kind or another.

5.1 Institutional types and cultures

The two institutions chosen for this study were selected for their broad similarity: the study aims to explore responses to a policy which seeks to weaken disciplinary boundaries in institutional contexts where disciplinary identities, and discipline-based forms of organisation, are well-established. In such contexts it could be predicted that policies with these implications may present considerable challenges, and thus might give rise to a variety of responses. The two universities chosen for the study are both (in South African parlance) historically white universities (HWUs), in contrast to the historically black universities (HBUs) established under apartheid rule. They belong to a small group of elite institutions that were amongst the first to be established in South Africa and who (according to Muller 1991, 2001) in their formative decades "pursued a classical, basic disciplinary agenda" (2001: p. 4), a characteristic they still preserve, although they have subsequently become more multi-faceted institutions. Both institutions have developed "strong research orientations with focussed and well-directed research portfolios and strong research management" (Cloete & Fehnel

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2002: p. 384). Although both institutions have diversified into applied research, they still retain a significant commitment to basic research. During the latter half of the 1990s, these institutions were amongst a small group that were able to increase research and contract funding very substantially, helping to consolidate the high-status positions these universities currently enjoy in the South African higher education landscape. They are both relatively high-capacity institutions in terms of the qualification levels of their staff, with "well over 40% of their staff being in possession of a doctorate and 80% at the masters level or higher" (*ibid*: p. 384), and compete relatively successfully with other institutions for the best-qualified school-leavers.

While both institutions agreed at the highest levels to be involved in the study, the anonymity of the institutions needs to be protected, both in the interests of the institutions themselves and those of the individual academics who agreed to be part of the study. The institutions are thus identified as 'UniA' and 'UniB' in this report. Although both institutions share strong similarities in their discipline-based history, tradition and configuration, there is at least one significant difference which may have influenced responses to the policy, which is that one institution (UniA) is an Afrikaans-medium university, while the other (UniB) is English-medium. This distinction contributed to somewhat differing dispositions within these institutions towards the state and its policies during the almost five decades of Afrikaner Nationalist rule during the apartheid era (1948 – 1994). The Afrikaans-medium institution tended to display a greater affinity with the goals of the state, while the English-medium institution was a site which periodically allowed some opposition to be voiced to some state policies (Bunting 2002a: pp. 65-74). There seems wide agreement (both in the literature and in the views of respondents interviewed for this study) that this differential history has had consequences relevant to the study at hand, most particularly in terms of differences in institutional culture. Bunting sums up the historical culture of the Afrikaans-medium institutions as follows:

> The high level of support which these universities gave to government had a major impact on their academic and governance cultures: by the 1990s they could be described as instrumentalist institutions which were governed in strongly authoritarian ways. ... Open protests by students or staff over government policies and actions were not countenanced, and

> were swiftly crushed on these campuses. Objections to institutional policies and actions, especially from those not entrenched in the central power structures were also not accepted. (Bunting, 2002a: pp. 66, 68)

In his account of the governance culture of one Afrikaans-medium university, Jansen (2001) notes the "powerful role of centralised authority within the institution", including the "all-powerful role of senior academics" and the effect this has of reducing other academics "to powerless observers of a centralised process" (*ibid*: p. 2). An important consequence of this historical legacy of strong centralised authority has been the relatively greater capacity in these institutions to manage transformation:

> There is a widely held view that the relatively rapid transformation at many of the historically white Afrikaans-medium institutions can be attributed to their inherited authoritarian culture, which is characteristic of highly administered institutions. ... Within these institutions the leadership managed to introduce and drive many changes, as there was very little resistance from within the institutions – either from students or staff – to these transformation initiatives. (Kulati & Moja, 2002: p. 239)

By contrast, the English-medium universities argued that they were not servants of the state, and did not need to serve the needs of the government of the day. Rather "they believed that their commitment to the universal values of academic freedom made it impossible for them to act as servants of the apartheid state" (Bunting, 2002a: p. 70) and periodically voiced their objections to apartheid policies even though they continued to accept state funding. Bunting notes that the governance culture at these institutions tended to be more collegial at senior levels (the executive and professoriate) while tending to be authoritarian below those levels. Kulati & Moja confirm that these universities "were characterized by a stronger collegial tradition where the culture of decision-making was more participatory, at least amongst the professoriate" (Kulati & Moja, 2002: p. 239). In short, although both groups of institutions had relatively strong management capacities (compared, for example to some of the historically black institutions at the time), the Afrikaans-medium institutions had a stronger culture of hierarchy at senior levels, and thus presumably a greater capacity to steer from the centre.

The strategies adopted by the institutions in the years immediately following the 1994 transition to democracy are, however, broadly similar, in that both institutions were moving to consolidate their dominant positions in a higher education landscape that promised to be fluid in an era of politically-informed reconstruction, in an increasingly competitive climate, not least from burgeoning private-sector institutions, and at a time when revenue streams need to be diversified in the face of the declining proportion of state funding in institutional budgets (Bunting, 2002b: p. 139). This strategy of consolidation was in contrast to other groups of institutions which either moved aggressively to grow student enrolments through a wider range of programmes (often distance programmes) or which hung back, waiting for the intervention of new state initiatives (Cloete, *et al*, 2002: pp. 174-180). The consolidation strategies of these two institutions focused on strengthening managerial capacity, firstly to adapt institutional missions in response to the 1997 White Paper, and secondly to improve internal efficiencies, including cost-cutting (Cloete & Fehnel, 2002: p. 385). Where these consolidation strategies might differ slightly, especially with regard to the development of educational programmes, is in the motivations which galvanized the respective senior management teams. The Afrikaans-medium institution (UniA) was particularly keen to demonstrate its willingness to respond to emerging policies (reflected in the White Paper), and in that way affiliate itself with the new dispensation, and distance itself from a history of close links with past Nationalist governments (Kulati & Moja, 2002: p. 239). The projections of senior management at UniB, on the other hand, perhaps resting on its record as a liberal institution[17], invoked international trends in higher education as the primary legitimating logic for its internal restructuring. These differences aside, both institutions embarked on the project of strengthening strategic management (including curriculum restructuring) with comparable zeal. This included staff reductions, restructuring of faculties,

[17] One of the reports produced at UniB in 1995 during the process of developing the Academic Planning Framework opens with the following statement:

> The university, for the first time in nearly half a century, finds itself operating in congruence with its political environment. Constitutional and social values now at last coincide with the university's values. This cannot be said of many other universities in South Africa. It may even be argued that the ethos of the University has in fact impacted on the new social compact and that the congruence now observed is, to a large extent, the result of the pursuit of democracy by a number of our academics and by the resistance put up by the University in the face of apartheid. (UniB, 1995: p. 1)

Less celebratory views may be found in Gerwel (1987) and Mamdani (1998).

The strategies adopted by the institutions in the years immediately following the 1994 transition to democracy are, however, broadly similar, in that both institutions were moving to consolidate their dominant positions in a higher education landscape that promised to be fluid in an era of politically-informed reconstruction, in an increasingly competitive climate, not least from burgeoning private-sector institutions, and at a time when revenue streams need to be diversified in the face of the declining proportion of state funding in institutional budgets (Bunting, 2002b: p. 139). This strategy of consolidation was in contrast to other groups of institutions which either moved aggressively to grow student enrolments through a wider range of programmes (often distance programmes) or which hung back, waiting for the intervention of new state initiatives (Cloete, *et al*, 2002: pp. 174-180). The consolidation strategies of these two institutions focused on strengthening managerial capacity, firstly to adapt institutional missions in response to the 1997 White Paper, and secondly to improve internal efficiencies, including cost-cutting (Cloete & Fehnel, 2002: p. 385). Where these consolidation strategies might differ slightly, especially with regard to the development of educational programmes, is in the motivations which galvanized the respective senior management teams. The Afrikaans-medium institution (UniA) was particularly keen to demonstrate its willingness to respond to emerging policies (reflected in the White Paper), and in that way affiliate itself with the new dispensation, and distance itself from a history of close links with past Nationalist governments (Kulati & Moja, 2002: p. 239). The projections of senior management at UniB, on the other hand, perhaps resting on its record as a liberal institution[17], invoked international trends in higher education as the primary legitimating logic for its internal restructuring. These differences aside, both institutions embarked on the project of strengthening strategic management (including curriculum restructuring) with comparable zeal. This included staff reductions, restructuring of faculties,

[17] One of the reports produced at UniB in 1995 during the process of developing the Academic Planning Framework opens with the following statement:

> The university, for the first time in nearly half a century, finds itself operating in congruence with its political environment. Constitutional and social values now at last coincide with the university's values. This cannot be said of many other universities in South Africa. It may even be argued that the ethos of the University has in fact impacted on the new social compact and that the congruence now observed is, to a large extent, the result of the pursuit of democracy by a number of our academics and by the resistance put up by the University in the face of apartheid. (UniB, 1995: p. 1)

Less celebratory views may be found in Gerwel (1987) and Mamdani (1998).

closure of some departments, and outsourcing of non-core functions. (Cloete & Fehnel, 2002: p. 387).

5.2 Interpretive strategies

In both institutions, the strengthened strategic management included the curriculum restructuring that is the subject of this study. It is worth noting, however, that the two institutions embarked upon the curriculum restructuring process at different points in time in relation to the formulation of the national policy. UniB in fact began formulating such a policy for itself at institutional level (termed an "Academic Planning Framework" or APF) at roughly the same time that a Presidential commission of inquiry into higher education (the National Commission on Higher Education – NCHE) was established in 1995. The Senate at UniB accepted the resultant APF as institutional policy in March 1996, before the NCHE report was presented to the Minister of Education in August 1996, and before the Draft White Paper on Higher Education was published in July 1997. This institution thus *anticipated* national policy in this respect. By contrast, UniA began its curriculum restructuring process as a *response* to the national policy, also by means of an institutional policy document called an "Academic Planning Framework".

5.2.1 The case of UniB

Since the UniB initiative was something of a front-runner in proposing 'programmes' as the unit of curricular delivery[18], I'll briefly sketch the discursive resources that were invoked to legitimate this device. One account of the origins of the APF in UniB suggests that the policy emerged from perceptions of a weakening of internal accountability structures in the institution, as a consequence of changing approaches to departmental management and the modularization of curriculum (du Toit, 2000). The shift in management came as a result of the phasing out of professorial chairs as permanent heads of subject departments, giving way to the rotation of headship amongst senior academics in the department. While this may have addressed the issue of the strong and sometimes arbitrary powers of permanent department heads, it also

weakened centralised control over disciplinary majors. This process was aided by the semesterization of previously year-long courses, and the proliferation of senior semester-courses offered as part of the disciplinary major. The consequence was a shift of discretionary powers over the content of curriculum to individual academics as course convenors, leading over time to the "splintering of the curriculum and the weakening of disciplinary majors" (*ibid*: p. 119).

This weakening of the traditional hierarchies and forms of control is countered by the introduction of a management discourse of 'strategic planning' at the centre. The architects of the APF confirm that the centralised structure (a Senate committee) tasked with academic governance, the Academic Planning Committee (APC), came under increasing pressure to provide a transparent and consistent basis for its decisions. Senior figures in this process commented as follows:

> [We decided that] we must find a systematic basis for academic planning and not this *ad hoc* thing – each new thing coming up and trying to make a judgement on it by itself. (BI-1a: p. 3)

> So the most immediate pressures were internal to the Academic Planning Committee, wanting consistency, wanting transparency about what it was doing. ... Then, outside of the Academic Planning Committee, there was the knowledge that funds were going to be continued to be reduced year after year and that in fact these pressures would become stronger, so that it was a self-protective device that APC had to know why it was doing it, what it was doing it for, and so it would be able to set priorities that were defendable. There were the pressures ... but there was no general overall analysis. (BI-5: p. 2)

The APF document itself foregrounds the financial pressures on the institution and, in the face of this, is explicit about the APF's role in strengthening the management capacity of the institution:

> With courageous academic planning, it will be possible to deploy our staffing and other resources more effectively and efficiently, so as to allow the university the flexibility to carry out its agreed mission. (UniB, 1996: p. 1)

[18] Senior management figures at UniA acknowledge frequently in interviews the influence that UniB's initiative (and senior personnel) had in shaping their own policy, although it is clear that UniA diverged in important respects from the route taken by UniB.

The document is also explicit about the introduction of 'programmes' as a device to enhance management capacity against the traditional authority of departments and faculties, and thus implicitly signals a diminishment of traditional autonomies:

> The classical institutional structures are a source of inertia for planning academic programmes, despite their strengths in organizational terms; a focus on programmes, on the other hand, forces academic choices about priorities and strengths and allows greater flexibility to respond to changing academic needs. (UniB, 1996: p. 3)

While the APF document is primarily strategic and managerial in its discursive thrust (and in fact pre-figures a fuller Strategic Planning Framework developed in 1997), a subsequent document (UniB, 1997a) develops more fully the vision of 'programmes' and their entailments. This document ('Programme Planning and Implementation within UniB's Academic Planning Framework') invokes a discourse of student-centred pedagogy, and declares "a shift from a disciplinary/departmental point of view to a perspective which places the overall experience of individual students at the centre stage" (*ibid*: p. 4). In this shift, the traditional emphasis on "sequential, specialized academic courses, usually synonymous with a discipline" will be replaced by a student-oriented point of view with emphasis on "the totality of the curriculum, including its coherence, opportunities for disciplinary specialization, quality, educational outcomes, and its provision of development opportunities for <u>all</u> students" (*ibid*: p. 4). This document makes it clear that the APF represents "a radical departure from the status quo" for those faculties in which there is "a strong tradition of open student choice and disciplinary primacy". Such faculties, the document continues, are characterized by students who "often" make "inappropriate curriculum choices", by a "lack of coherence between different disciplinary elements in the curriculum", by "repetition between courses" and by "the predominance of pragmatic factors" such as timetabling issues (*ibid*: p.4). The pathology is extended to academic staff:

> Teaching staff will again not share the student's global view of his or her curriculum, and will not easily become aware of lack of coherence, or of the possibilities of exciting, co-operative teaching opportunities. (*ibid*: p. 4)

In contrast to the "closed worlds" encouraged by the traditional departmental structure, the APF is a framework for "ensuring coherence", for "best practice

teaching and learning" and for the "value-addedness which a successful student achieves at the end of his or her period of study at UniB" (*ibid*: p. 5). Significantly, new programmes are to be built, not around 'majors', but around 'core courses' – the first formal signal in this context of a move to de-legitimize disciplinary majors (and their accompanying logic) as the central pillars of undergraduate curricula.

Clues as to the origins of this move to weaken disciplinary boundaries may be found in the circulation of ideas associated with the Mode 1/Mode 2 debate initiated by the publication of the book by Gibbons, *et al* (1994): *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies.* An NCHE background paper (Muller, 1995) summarising the thrust of the book's ideas was amongst the papers considered by the APF team. Essentially the book makes the case for the emergence of a new interdisciplinary mode of knowledge production (Mode 2), alongside the conventional discipline-based mode (Mode 1), where knowledge is produced in interdisciplinary problem-solving contexts. One of the implications, the paper suggests, is that "large, tenured, stable departments and faculties are both too expensive and too inflexible to be realistic models for the future" (*ibid*: p. 5) with the consequence that "university organization moves from collegiality to managerialism, to a greater interpenetration of academic and managerial practice" (*ibid*: p.7). Coming as it did at a juncture of thorough-going policy-review across the education sector, the 'Mode 2 thesis' gripped the imagination of many in the policy community, and a fierce debate ensued (Kraak, 2000). In his contribution to the debate, Muller argues against a view which sees Mode 2 interdisciplinary knowledge as replacing Mode 1 discipline-based knowledge, pointing out that good Mode 2 knowledge relies on a firm foundation of Mode 1 knowledge, established in the first instance in discipline-based undergraduate curricula. Instead, Muller concludes, these two knowledge forms should be seen as supplementary (Muller, 2000: pp. 45-54). These warnings, however, may have come too late to temper the vigour with which the architects of the APF at UniB embarked on an assault on disciplinary boundaries. One of the most senior figures commented as follows during an interview conducted in 1997, suggesting an emancipatory promise that would follow from breaking open the 'closed worlds' of disciplines:

> I've been enormously intrigued with the actual nature of scholarship and its tendency to encapsulate itself. Essentially that is the theme of disciplinarity, and in fact rhetoric – the jargon that disciplines develop – is designed not so much as to explain things to themselves as to make them inexplicable to others. ... Because of the silos between disciplines there's usually a totally impermeable layer - the one discipline cannot talk to other one at all. ... So the fact is that those are all silos, and I was very much interested in that aspect of the programmes, which is to open minds, to reveal the way in which different disciplines have built up an image of the world, and of knowledge and so on. ... So that's why the lateral connections [between disciplines in programmes] are also designed to empower the learner to feel that you actually know more than that lecturer. (BI-3a: pp. 4-5)

The discourse of the APF which advances an alternative mode of *pedagogy* (student-centred learning, as opposed to discipline-based learning) thus seems also to feed off another discourse concerned with changes in *knowledge production* (Mode 2 as opposed to Mode 1 research), and conflates the two into a prescription for the undergraduate curriculum. But rather than proposing a fully-fledged learner-centred approach to pedagogy, like problem-based learning (Savin-Baden 2000), what is expected instead is a change in the relationship between academics in different departments as they work together in programme teams to align the knowledges of their respective discipline-based courses in the production of a seamless curricular construct for students. One of the architects of the APF, interviewed in 1997, outlines the technology of alignment, and the collaborative comportment of academics, that is associated with learner-centredness as follows:

> To get some kind of coherence in this, people teaching courses that are now going to be closely linked in the programme, need to know in the first instance, what each other are actually doing. ... In fact to unpack for each other what it is that they are trying to achieve at different points in the course, what they take for granted and what their opinions are and therefore how their assessment works on some very important issues. ... The people teaching across the first year, or the first semester actually, are going to have to get together and talk about what they are doing in terms of the key issues like conceptual development - what approach are they taking to conceptualise - do they start with definitions in the classic academic way and then go onto applications later, or do they build up through experience etc? ... And then we are going to have to get into the much more difficult job, I think, of trying to get some kind of harmonising. ... We are setting up a very different kind of community now, that is stressing the lateral, not because that is the only thing, but because it has never been stressed. (BI-2: pp. 1-2)

In this way the discourses about changing modes of knowledge, and about alternative pedagogy, are recruited to weaken the autonomies of subject departments, and disciplinary identities, make academic practices (and academics themselves) more visible and subject to surveillance, centralise decision-making about curriculum, and so work to advance the managerial project which underlies the APF. Significantly, the senior management figure quoted above plays an active role for the South African University Vice Chancellors' Association (SAUVCA) in interpreting the requirements of SAQA and the NQF, and by all accounts he represents a significant means by which the discourse of outcomes-based education becomes legitimated in the institution's policy-making circles at the time.

These discursive strategies seem to be designed to place pressure on traditional insular or discipline-based academic identities to move towards adaptive dispositions of one kind or another. As I shall show below, this discursive pressure at UniB seems more strongly stated than its counterpart trend at UniA. By contrast with this trend towards internal cross-border connectivity, there is very little evidence in either the documentation or the interviews of an 'official' pressure towards outwardly-responsive dispositions oriented towards the market.

Although the UniB Senate accepted the APF as institutional policy in March, 1996, the terms of its implementation were contested or resisted, especially once the strong learner-centred discourses and the assault on the autonomy of the disciplines became evident in subsequent documents. Inevitably there was resistance, and the attitude and response articulated by this respondent is typical of many academics across the institution:

> The academy is based on disciplines. Disciplines are housed in departments. ... That's the way it should be. ... What I am going to do – which all of my colleagues are going to do, and they've told me this, and we agree – is do the same as before. So it's business as before, and we'll re-package it and re-label it and we'll doll it up to be anything you want it to be, but just don't bugger around with the fundamentals because that's what we've been delivering and we think it's been fine in the Science Faculty. And we'll continue to give you the same stuff, and we'll put different wrappers on it if you like. That's the view. (BS5, p. 1)

In the ongoing negotiations over implementation, the UniB administration (like their counterparts at UniA – see below) applied different rules respectively to the Science and Humanities Faculties, requiring a much more radical restructuring from the Humanities than from the Sciences. Although the traditional notion of a "major" was ruled out as the basis of curriculum construction, this was strongly enforced in the Humanities Faculty, while a separate (and private[19]) deal was struck with the Science Faculty which effectively allowed the Science Faculty curricula to continue to structure curricula on discipline based majors, albeit under a different name. Students in this Faculty could construct their curricula by choosing between a range of "specialisation fields" (which mostly corresponded with the majors of before) or opting for a "specially constructed curriculum" which tended to be a vocationally-oriented construct with a defined graduate identity and relatively little choice in subject combinations.

This differential, and harsher, treatment of the Humanities Faculties, evident in both institutions, seems to have been driven by an instrumental discourse which valorized science disciplines over humanities subjects on the pretexts that, firstly, the former were more demonstrably valuable to the economy than the latter; secondly, that the humanities were 'softer', less rigorous and thus easier options than the 'harder' science disciplines, and thirdly, by a perception that the weaker, often black, students tended to opt for what were seen to be less-valued humanities subject combinations, like a home language and religious studies. The policy texts (especially the 1996 NCHE Report and the 1997 White Paper) were explicit in wanting to shift the 'shape' of student enrolments towards the science, engineering, technology and commercial fields of study (Bunting 2002c: p. 152). Both institutions targeted their respective Humanities Faculties for downsizing, and required from them much more rigorous restructuring of curricula towards instrumental ends. This represents a more targeted assault on the status of humanities-related identities.

[19] Respondents note how the agreement was struck in a private discussion between three senior figures in the Science Faculty and the Deputy Vice Chancellor (Academic), and that the agreement was never endorsed by the committee set up to manage the programmatization process:

> Because I mean [the Dean] was quite worried about it – he asked [the DVC(Academic)] what mechanisms we should use to have this approved, and [the DVC (Academic)] said that as Chair of [the implementation committee] he was satisfied that we hadn't been doing the wrong thing. (BS2: p. 12)

The managerial project, however, was not without its costs. Although UniB comes from a liberal tradition, and would qualify as having a more collegial culture (at least at senior levels), the process of programmatization seems to have worked to undermine the culture of collegiality, and a very widely articulated theme in many interviews is a growing (and often deeply-felt) antagonism between academics and management. The extent of this alienation across these two faculties, and the depth of feeling associated with it, may be a measure of the extent to which academic identities were destabilised by this process:

> But why the fuck didn't [management] listen? Why this know-it-all attitude of the people who went around? Why didn't they listen to what was being said? It seems to me quite exasperating, you know, that there was this attitude. People resented it and resent it still bitterly. And it has led to major alienation of [the administration] from campus. People like [names management figures] wandering around and telling us, as members of faculty who know what's what in a discipline, what ought or ought not to be done. (BH3: p. 5)

An international consultant called in to advise UniB during that period noted that the institution was "over-administered and rather seriously under-managed. It is highly bureaucratic in its decision-making style". He noted the accretion of "layer upon layer of bureaucratic controls" which have tended to make decision-making processes "more obscure rather than more transparent to the academic community", with the result that "the machinery seemed to have become more important than the product". He noted:

> ...a deep, and largely mutual, breakdown of relations between the academic community and the central administration. ... There is a real lack of confidence and respect between the two sides, and this exacerbates all other difficulties that the University faces. (Shattock, 2000: pp. 3-4)

Whether the climate of discord at UniB is the consequence of particularly heavy-handed management, or whether it is the inevitable result of the onset of managerialism in a once-collegial institution, need not detain us here. The point is that the process of curriculum restructuring occurred in – and was partly responsible for – a climate of deteriorating relations and declining trust between academics and management (important indicators, I would suggest, of destabilized identities), and

this is inevitably reflected in some of the UniB case studies which follow in subsequent chapters.

5.2.2 The Case of UniA

By contrast with the experience at UniB, the testimony of respondents from UniA, an institution whose culture is widely-acknowledged (even within the institution) to be relatively more 'authoritarian'[20], is that the restructuring exercise was a difficult but ultimately productive experience. Where the discord at UniB over the programmes process extended comprehensively throughout the institution, at UniA the senior academics that I interviewed were almost entirely unanimous that the process, although difficult, was relatively transparent, fair and ultimately constructive. The enduring criticisms that were voiced about the process came from more junior (often female) academics whose testimony suggested that transparency and fairness were not an entirely universal experience in the institution. Nevertheless, it is the impression of this researcher that the relationships and loyalties at relatively senior levels in the institution (senior lecturer and above) remained largely intact despite the restructuring exercise, this in contrast to the case of UniB.

As was noted earlier, Afrikaans-medium institutions were generally keen to show their willingness to accede to the transformation agendas of the state, and UniA was no exception. In one of its publications, the institution noted that it intended to dispel its image of "institutional conservatism" and its reputation for "a circumspect approach to transformation" (Respondent AH2, 1997: p. 25), and several respondents echoed this. The discursive strategy within the institution, however, was to acknowledge the pressures set up by the state restructuring initiative and use that as the pretext and timetable for change, but then to recruit the legitimating principles for the restructuring from elsewhere. Senior management concedes that although they understood at the outset where to begin their assault on the traditional edifice of curriculum, they were less confident about the replacement discourse:

[20] It may be that the authoritarian culture of the past may have moderated by the time of data-gathering for this project. Certainly, the senior academics responsible for driving the restructuring were careful to invoke the notions of collegiality, transparency and fairness, and to acknowledge the limits of top-down authority to bring about change in the institution. Nevertheless, several respondents referred to the relative greater "respect for authority" that was a feature of the institution.

> People realized that things are coming to a close for the old-fashioned 'BA General' type of thing. And, fortunately, at one discussion about future developments in the university with the student body, the Rector said very specifically that that degree would disappear. Of course the Faculty did not like it that it was said that way, on that occasion, but that was the best thing that could have happened because immediately they started asking the critical questions as to how they should plan for the future. ... They were asking questions of me as to what the programmes should look like, what should we take into account, and I just tried my best, but I couldn't answer them with finality. (AI3: p. 3)

The Humanities Faculty, still reeling from recent staffing cuts and departmental closures, decided to take the initiative and commissioned one of their most senior professors (AH2) to investigate the issue, with a view to influencing the debate from their perspective (see Chapter Six for more detail on his work). Senior management conceded that "he did a good job for the Faculty [of Humanities], and we said we need that for the university" (AI3: p. 4). In this way, a key interpretive move came from the academic ranks themselves, rather than state policy texts, or management. This interpretation, which emanated from an academic constituency (rather than an advocacy or transformation-oriented constituency), was foundational in shaping the approach taken at UniA, particularly in the primacy that was accorded to disciplinarity (as I shall show later in this section, and again in Chapter Six), and thus disciplinary identities. Although the interpretations developed within the Humanities Faculty were adapted for use elsewhere in the university, the primacy of intrinsic criteria remained a resilient value. Consistent with this, AH2's interpretive work was careful to recruit the international literature, rather than the local policy texts. A senior management figure comments:

> People are extremely negative, more and more, about a bureaucracy like SAQA and even the Department of Education. ... That's why [Respondent AH2] convinced people that it is not SAQA that determines what we do with our programmes. We did it because *we know* we have to do it. ... He worked with the Carnegie Report, one of the Boyer Reports, and the Dearing Report very extensively, and actually outlined to people that these are the crucial issues one has to grapple with, and these things are worldwide. That gave a sense of urgency to people, realising "I have to think differently to what I experienced thirty years ago". (AI3: p. 21)

Indeed, the national department responsible for higher education, and other state-related agencies are repeatedly pathologized[21] in the interviews with senior figures (in contrast with UniB, where the discourse sponsored by state agencies is sometimes invoked by management to legitimate the reform), and they make it clear that in order to maintain the credibility of the restructuring project, they needed to maintain a discursive insulation between the institution and the state agencies:

> We also acted as a sort of filter, not to relay every change in the Department [of Education]'s position to people on the ground because it would be not only very confusing but also demoralising, because that process, if you remember, was going on all the time. It was shifting, and shifting, and shifting, and that was one thing to protect your people from. I think there was at least maybe a false sense of continuity, of purpose, of some logic in the process, and people thinking you know where you're going. (AI2: p. 21)

This insulation enables the UniA management to maintain the interpretive initiative. Although the international exemplars are invoked to justify the restructuring, it is the strategic priorities of the institution that are ultimately to be advanced. The priorities that are listed by senior figures are, firstly, advancing the niche strengths of the institution and, secondly, widening access to previously excluded groups; however respondents acknowledge that the latter priority received scant attention. Instead, the discourse of outcomes-based education, divorced from its market-based or social equity-based origins, is used as a means of subordinating intrinsic disciplinary frames of reference to the broader strategic goals identified by management:

> And there the outcomes-based thing was very important. To say, OK, what kind of product is there? What kind of content, abilities and skills should students have ... and how do you get to that point and what is needed in the process? ... Then it became a bargaining process because everybody had to put on the table [what they had to offer].... And then it was horse-trading and bargaining. ... We broke the whole General BA through that process, and the most amazing combinations developed. ... But that was an uncomfortable position for many people, and threatening, because some succeeded and some did not. Because it became – not a free market – but dependent on the initiative and the

[21] Although it is the broad stated intention of senior management figures to profile the institution as one that is transforming in line with the values of the new democratic dispensation, there is nevertheless repeated criticism of the capacity of, and some of the choices made by, these state-related agencies. This criticism, however, circulated widely in higher education institutions, and was not limited only to UniA.

> quality of the offerings, and not a secured, assured space. ... And a lot of the old stuff was thrown out. (AI2: p. 6)

In spite of this assault on traditional curriculum structures and traditional securities (especially in the Humanities), a significant feature of the interpretation in this context is that, although the discourse of interdisciplinarity circulated powerfully here, the integrity of disciplines was recognised:

> One of the [things] that Faculties don't understand is that in the new set-up, in the new knowledge terrain, there is no way of isolating yourself. It's only to your detriment. And it's the old debate about interdisciplinarity – it's two processes that re-enforce one another: in order to be a good interdisciplinarian, you have to be good at a discipline. So the deeper you go, the better you can be. ... But on the other hand there is no way you can lock yourself up into an isolated position – you will just lose all the time. (AI2: p.11)

It is in this regard that the approach taken at UniA departed from the route followed by UniB: the discipline-based major remained the fundamental building block of curricula, and ultimately academics were asked to justify their programme arrangements according to principles intrinsic to the disciplines. So although the discourses of learner-centredness and outcomes-based education also circulate within the UniA context (as they do at UniB), and they are deployed to weaken the autonomies of disciplines and force cross-border collaboration, it seems that the process is less intrusive, and that something of the integrity of disciplines, and discipline-based identities, is preserved in the process. The most senior figure responsible for facilitating the process puts it as follows:

> Whatever we do must be *academically* sound, it must make sense in terms of what we think is important for a university to be a university. ... So the whole exercise was really taken from a broader perspective and was placed on an academic basis right from the beginning, 'academic' in the sense of what our colleagues will understand. ... Let's do it for our *own* purposes. ... Does it make sound academic sense? ... That was the social contract between academics and the University. (AI2: p. 2)

So although the programmatization process represented a radical destabilization across the institution (particularly for Humanities), and is described by senior management as "a very, very tough ball game" (AI3: p. 8), it seems that the basis for a

continuity of discipline-based academic identities is maintained, and the relationships between senior academics and management have survived the process. There is, thus, clear evidence in the context of UniA that pressures are at work to nudge academic identities towards connective dispositions, but these pressures appear to be more measured than those experienced at UniB, limited in their effect perhaps by the continued respect for disciplinary identities. A relatively common experience is for academics to talk about the discomfort they felt at the process at first, but their eventual satisfaction with the results. It seems that by-and-large the destabilization is seen ultimately to have constructive consequences, enabling both generative connections across borders as well as re-orderings within departments, and the 'social contract' referred to above has remained largely intact, at least at the senior levels.

As is the case at UniB, there is little evidence in the interviews or the policy documents here of concerted pressure for academics to be responding to the market with strongly vocational curricula, the rhetoric of the promotional materials notwithstanding. The institution is certainly keen to identify and promote the niche priorities for the institution, but this does not translate into systematic pressure for academics in normally insular disciplines to be building new links with industry.

Once again, whether the constructive outcome of the restructuring is a consequence of skilful management, the legacy of an authoritarian past, or simply a respect for disciplinarity is not a central concern of this study; instead, in this chapter, I have attempted to identify some general contextual features with which to frame the case studies that follow.

5.3 Conclusion

We see, then, two institutions which are similar in many respects. Both are elite institutions with well-established discipline-based traditions and track-records in basic research. In the period of transformation during the late 1990s, both institutions act to consolidate their positions in the field, and to strengthen their internal managerial control. Both act decisively to implement the programmatization of curricula, and both have considerable management capacity to take this forward. Both institutions require more radical reforms from the their respective Humanities Faculties than they

do from other faculties. Both institutions decide to retain discipline-based departments as the primary unit of academic organization, and choose thus to overlay the new programme structures over this traditional geography. Both institutions exert distinct pressures on academics to take on connective dispositions within the walls of the academy, while neither yet seem ready to make concerted moves to pressure academics to forge closer links with the market.

But important differences also become evident in the course of the study. The differential identities and histories of the institutions imply there may be significant variance in their respective institutional cultures, with the relatively more authoritarian tradition of the Afrikaans-medium institution possibly being an asset in enabling management to undertake adaptive initiatives. Whether or not this is the case in this instance is not the primary focus of this study, and the data gathered for the study cannot reliably conclude one way or another. What is apparent though, is that the constituency of academics interviewed for this project (heads of departments, programme convenors and other significant on-the-ground actors in the programmes initiative) have experienced the final results of the restructuring differently, with the academics in UniA reporting in the end a considerably more constructive experience. What may have contributed to this differential set of perceptions about the process is the extent to which primary discipline-based identities were destabilized at the respective institutions during the implementation of the reform. While UniA retained the disciplinary major as the basic unit of curriculum construction, and allowed intrinsic criteria to justify programme structures, the management at UniB disallowed the major as a legitimate building block for curricula (at least in the Humanities Faculty) and instead prioritised criteria derived from learner-centred discourses[22]. The impression, accumulated in many interviews across the two institutions, is of resilient collegial relations and trust sustained between academics and management at UniA, while these qualities have suffered significant deterioration at UniB during the period under study.

What this may suggest is that at UniB, management has attempted to push academic identities either too far or too quickly in a particular direction, or in a direction not

do from other faculties. Both institutions decide to retain discipline-based departments as the primary unit of academic organization, and choose thus to overlay the new programme structures over this traditional geography. Both institutions exert distinct pressures on academics to take on connective dispositions within the walls of the academy, while neither yet seem ready to make concerted moves to pressure academics to forge closer links with the market.

But important differences also become evident in the course of the study. The differential identities and histories of the institutions imply there may be significant variance in their respective institutional cultures, with the relatively more authoritarian tradition of the Afrikaans-medium institution possibly being an asset in enabling management to undertake adaptive initiatives. Whether or not this is the case in this instance is not the primary focus of this study, and the data gathered for the study cannot reliably conclude one way or another. What is apparent though, is that the constituency of academics interviewed for this project (heads of departments, programme convenors and other significant on-the-ground actors in the programmes initiative) have experienced the final results of the restructuring differently, with the academics in UniA reporting in the end a considerably more constructive experience. What may have contributed to this differential set of perceptions about the process is the extent to which primary discipline-based identities were destabilized at the respective institutions during the implementation of the reform. While UniA retained the disciplinary major as the basic unit of curriculum construction, and allowed intrinsic criteria to justify programme structures, the management at UniB disallowed the major as a legitimate building block for curricula (at least in the Humanities Faculty) and instead prioritised criteria derived from learner-centred discourses[22]. The impression, accumulated in many interviews across the two institutions, is of resilient collegial relations and trust sustained between academics and management at UniA, while these qualities have suffered significant deterioration at UniB during the period under study.

What this may suggest is that at UniB, management has attempted to push academic identities either too far or too quickly in a particular direction, or in a direction not

seen as legitimate, or that the manner of the pressure has violated construals of the academic 'social contract' in that context. The process at UniA, by contrast, seems to have somehow preserved the general integrity of academic identities[23].

This study, however, is concerned with a specific constituency of academics: those who appear to comply more or less substantively with the spirit of the reform. Although these were the ultimate object of interest, a wider constituency was interviewed at the outset in order to identify this group, and most programme convenors were interviewed across the two faculties in question at the respective institutions. From these interviews emerged the predictable mix of responses: resistance, reluctant compliance, subversion, distortion and, in a relative minority of cases, more or less enthusiastic or substantive compliance. By and large, most programmes represented an effort to re-package existing offerings with as little disruption as possible to academic business as usual, and in both institutions, this was achieved more easily in the Science Faculties. The majority of academics have thus retained their insular dispositions as far as possible, interpreting the policy pragmatically to enable this. The exceptional cases, those who seem to have responded substantively to the reform, are the focus of the remainder of this study, and the next four chapters present case studies of what appear to be instances of adaptive behaviour. These studies will examine the dispositions and motivations informing the compliant activities of these academics, as well as their experiences of their participation in the new organizational forms associated with programmes.

[22] In both institutions, informants concede that criteria were, in the event, unevenly applied in pragmatic compromises and accommodations.

[23] What must be acknowledged at this point are what could be understood as cultural differences in the way academics at the two institutions represent themselves. I gained the impression that colleagues at the Afrikaans-medium institution were less inclined to make public the internal difficulties they may have experienced, while their counterparts at the English-medium institution made full use of the liberal tradition of open critique. The conclusion that I have come to here, that the restructuring process was less fundamentally disruptive of traditional academic identities at UniA than UniB, is arrived at whilst taking these cultural differences into account. At UniA, even the most disenchanted of respondents acknowledged both the relatively more authoritarian culture of the institution *and* the ultimately constructive comportment of management figures in the process. Academics typically disclosed the stress, conflicts and other difficulties they experienced, yet affirmed (in their view) the by-and-large positive outcome, or at least the even-handedness, of the process. By contrast, the alienation articulated at UniB is consistent and apparently deeply-felt, even on the part of those who are circumspect in their comments or who have ultimately benefited from the restructuring.

CHAPTER SIX: CASE STUDIES IN THE HUMANITIES: ADAPTATION IN 'GENERAL' HUMANITIES PROGRAMMES

> Curricular integration has been a serious, recurring educational recommendation. This pattern has a double-edged message. In support of integration, the recurring call for greater curricular integration testifies to persistent and important inadequacies in our curricular arrangements. Against integration, the fact that, for the most part, these calls have been ignored or rejected suggests the appropriateness of reservations and care in implementing curricular integration. (Case, 1991: p. 222)

This chapter presents the first of two pairs of case studies focusing on adaptive dispositions of academics in programmes situated in the Humanities faculties of the two institutions under study. In these cases, where academics seem to have moved to comply substantively with the programmes policy, the interest is in the motivations and dispositions that prompt academics towards adaptive behaviour, and the institutional conditions surrounding these adaptive initiatives. Are these academics responding to the discourses of the policy texts, or are they motivated by other orientations? How have these academics experienced the adaptive process? Are we seeing the emergence of new academic identities, more oriented towards change?

This chapter will thus commence by sketching briefly the differing interpretations of the programmes policy adopted in these respective sites, focusing firstly on UniA's *BA in Humanities*, and then on UniB's *Film, Media and Visual Studies*. The case studies then go on to illustrate two key dimensions of the analytic project: firstly, I exemplify some of the identity dispositions underlying the apparently compliant participation of academics in adaptive organizational behaviour, and secondly I explore the dynamics within the programme groupings, and between the programme and the wider institution, to illustrate the challenges involved in attempting to give effect to adaptive dispositions associated with the new models of curriculum. As it happens, and because of the differing dynamics at work in the two sites, the UniA case works best to illustrate the first of these purposes, while the UniB case sheds light on the second purpose; the comparative view, however, offers insight into the implications of the varying social and cognitive orientations at work in these two cases of adaptive activity.

6.1 Structural characterization of the programmes

As noted in Chapter Five, the great majority of academics in these faculties across both institutions (institutional rhetoric notwithstanding) developed programme structures which tend towards preserving insularity in the form of discipline-based majors (in the case of UniA) or discipline-based modules (in the case of UniB). Within the UniB Humanities context, however, the emergence of *Film, Media, and Visual Studies* (*FMVS*)[24] signalled a different dynamic, and many figures in the Faculty pointed to this construct as a site of considerable cross-border activity on the part of academics from several departments, activity that seemed to reflect greater levels of commitment from academics to the new curricular entity than was the case more generally[25]. The UniA counterpart programme (*BA in Humanities*) is far from being a precise match, but is the closest available counterpart in terms of the disciplines represented in the programme. Senior figures in this Faculty were equally enthusiastic about the cross-border achievement of this programme although, as I have already suggested, differing principles of coherence were operating in each context (with differing implications for the respective discursive and regulative possibilities).

Both of these programmes have a similar aim, which is to offer a construct which encompasses a range of humanities disciplines, clustered in various ways which could be argued as 'coherent', albeit for differing forms of coherence. In both cases, the clusterings serve to limit students' choice of subject combinations, but these are managed in very different ways, with somewhat different arguments being advanced for the nature of the 'coherence' being achieved. Each of these structures, and their respective approaches to achieving 'coherence' is outlined below.

[24] *Film, Media and Visual Studies* is in fact a stream within a larger programme called *Cultural and Literary Studies*, but the complexity of this stream (with its own sub-streams), and the number of academics associated with it, warrant its treatment as a case in its own right.

[25] Although academics associated with the *FMVS* programme are no less critical of the assumptions underlying the restructuring, and the manner of its conduct, than their counterparts elsewhere at UniB, they are nevertheless strongly committed to the new *FMVS* curriculum that the reform has made possible.

The Humanities Faculty at UniA settles for a variety of structural models for its programmes, from tightly-structured constructs with highly-specific focuses (e.g. *BA in Human Resource Management*) at one end of the spectrum, to the most loosely-structured *BA in Humanities* at the other end. Further, disciplines and 'majors' are retained as the basic building blocks of programmes. In the *Humanities* programme, students still end up embarking on a double-major, but their choice of majors is now limited to a pair of subjects from *one*[26] of three groupings of "thematically related subjects" (UniA, 2000: p. 14). These three themes are:

- Man's[27] Thinking, Language, Culture and Art,
- Man and Society
- Man's Development through the Ages

Apart from the choosing the double major from subjects listed within one of these thematic groupings, students are required to take additional subjects from the other two thematic areas, lending an element of breadth to complement the focus and depth promised by the majors, and enabling the final choice of majors to be delayed until the third year.

Three arguments for coherence are advanced for this programme's structure. Firstly the clustering of majors into themed groupings suggests that the double major will be in broadly cognate or thematically-related disciplines. Secondly, a claim is made that the programme equips students to be "academically flexible and to solve or deal with current problems in South Africa in a wide variety of professions" (*ibid*: p. 14). This "South African" focus finds effect in a requirement that all disciplines offering majors in the programme will need to ensure that the third-year levels of study should concern South African issues and problems. Thirdly, in their third year of study students are also required to take two semester courses from a list of available "metadisciplines" which promise to play some sort of synoptic or integrative role.

[26] Interestingly, the only discipline permitted to occupy more than one theme is Psychology, because of its wide appeal amongst students and thus its relative power in the Faculty.

[27] In the original Afrikaans, this theme is rendered as *Die mens se denke, taal, kultuur en kuns.* In Afrikaans, *die mens* refers to both male and female. The translation of this term into the English "man" in the UniB promotional material was, the programme convenor acknowledges, problematic.

This arrangement, however, has enabled the persistence of the traditional discipline-based structure of curriculum, where a student completes three years in each of two majors, together with a collection of ancilliary subjects (which could include two sub-majors of two years each). The effect is to bring a greater degree of control over students' choice of subjects for the customary "General BA", but without interfering significantly with the control that departments have over their disciplinary curricula. Where limited intervention into curricula has been effected, this has come from committee structures within the Arts Faculty whose brief has been to approve the 'coherence' devices outlined above.

In the case of UniB, by contrast, the notion of a 'major' disappears entirely, and the *Cultural and Literary Studies* programme consists instead of four 'streams', each of which is a composite of courses from various disciplines. The four streams are:

- English Studies
- African, Colonial and Postcolonial Literature and Culture
- European and Mediterranean Studies
- Film, Media, and Visual Studies

Students are required to choose their stream at first-year level, and the possibilities for changing this choice in subsequent years are very limited without adding further years of study. Once in a stream, students are directed to some compulsory courses, and may choose others from very limited sets of electives aligned with the focus of the stream.

The case for 'coherence' in this arrangement is fourfold. Firstly, coherence lies in the selection of courses that are seen as aligned with the focus of the stream. Secondly, each stream has a series of compulsory courses which support the focus of the stream (stream core courses). Thirdly, there are a set of courses which are compulsory across all four streams of the whole programme ('programme core courses'). Finally, the content of some courses (especially 'core' courses) has been customized for the programme or stream.

This structure breaks with the tradition of the three-year major, and in place of the role of disciplinary content and method pursued to depth, the compulsory core courses ("strong central theoretical and critical courses" UniB, 1999: p. 8) aim to develop an analytic language that is common across all the streams, while the electives provide content related to the stream focus from various disciplines. In this arrangement, the control over the quality of the student's collective experience passes from the discipline-based departments to the committee structures governing the programme.

In summary, then, the UniA programme continues to rely on established notions of disciplinarity, and seeks coherence in appropriate combinations of these strengths. The UniB programme, by contrast, seeks coherence in a generic theoretical language of analysis, and collections of courses appropriate to the themes of the various streams.

Each of these models of curriculum construction has differing implications for the longer-term social organization within their respective faculties. In the case of UniA, where the responsibility for the integrity of disciplinary majors remains with subject departments, the most intense cross-boundary activity is likely to be during the initial phase of programme development as *departments* negotiate their participation in various programmes, and in the 'meta-disciplines'. Once these arrangements have stabilised, the chief organizational base for programmes will continue to be subject departments, with periodic episodes of review undertaken by programme committees. By contrast, the UniB programme model places a far greater reliance on individual academics to negotiate their inclusion into programmes, and a greater reliance on programme committees and (as it turns out) faculty administrative resources to administer the programme, to manage the inevitable conflicts and unresolved issues, and to ensure the quality of the overall student experience of any given stream of the programme. The central interest of the analysis undertaken of this pair of case studies (and indeed the following case studies as well) is in the social and discursive orientations of academics who have played a leading role in these adaptive initiatives, as well as in their experience of the adaptive process. The aim is to explore the values that have motivated these academics, the ways in which they have interacted with each other in these processes, their perceptions of the processes, and the contextual conditions which may have played a role in shaping the social dynamics. In short, the

interest lies in assessing whether there is any evidence of changing dispositions amongst academics, especially a greater readiness to respond to exogenous pressures from the state or the market.

6.2 The Humanities programme at UniA

I shall use this account of the *BA in Humanities* programme to illustrate three differing dispositional types associated with this instance of relatively adaptive engagement with the curriculum restructuring reform. One of these types is the traditional insular disposition, and the other two types illustrate the differing motivations informing academics who seem willing to engage substantively with adaptive initiatives. In each case I have selected individuals who seem relatively clear exemplars of the type (keeping in mind the complexity of academic dispositions noted in Chapter Four). I begin with two examples of the *traditionalist* identity type (to indicate how variations can be accommodated within one type), before moving on to illustrate the *cognitive-adaptive* and the *pedagogic-adaptive* types. I shall devote considerable attention to the first of the individuals I have selected, because of the very significant role he played in this faculty and institution.

The story of the *BA in Humanities* programme at UniA begins with the strong interpretive framework developed for the Humanities Faculty (and indeed for the rest of UniA) by the *first of the exemplary individuals*, one of the senior professors in the Faculty (identified as 'AH2' in the interview data, and as 'Respondent AH2' for the documents he has authored). This individual studied the various policy documents available at the time, in pursuit of clarity on the many vexed questions surrounding the nature of 'programmes', and produced a booklet (and subsequently other clarificatory documents) summarising the result of his highly systematic study of the issues. By all accounts it is clear that his interest in the project, his detailed grasp of the issues, and his strong and determined intellect combined to make him a very significant leader in the restructuring process at UniA generally, and in the Humanities Faculty in particular. For this reason, I shall dwell at some length on elements of the regulative discourse projected by this individual, for it seems certain that he is responsible for key interpretations of the notion of 'programme' at UniA, and thus for the (re-)assertion of particular values underpinning the academic

enterprise. In the account that follows, we shall see playing out the contest of value-systems that is characteristic of episodes of curriculum reform.

An important interpretation in AH2's keynote booklet, and a foundational value for the discursive orientation informing much of the restructuring enterprise at UniA, is an acknowledgement of subject disciplines as the central building blocks of programmes:

> It is important to note that the official documents nowhere state that all programmes have to be interdisciplinary: interdisciplinarity is not posed as a necessary condition for the content of programmes. An idea which does figure prominently is that the content of all programmes must be characterized by a large measure of coherence. (Respondent AH2, 1997: pp. 9-10)

Confirming this discursive orientation, he argues further for a continuity between curricula of the past and the programmes of the future:

> There seem to be those who consider that **all** degree courses and (subject) modules currently presented are 'out of date', 'insufficiently relevant', 'not interdisciplinary enough', 'not in the spirit of transformation', etc. In terms of this view, programme construction must start 'on a clean slate' and all programmes need to built up 'from scratch'.
>
> The 'clean slate' approach to programme construction must be rejected. ... [T]here are a large number of (subject) modules that would require no radical changes in order to be serviceable as 'building blocks' of programmes. (Respondent AH2, 1997: p. 16)

As I noted earlier, this affirmation of disciplines (and by extension 'majors'), and thus of their inner logic as the primary principle for recontextualization, stands as a feature of programmes in the Humanities Faculty at UniA, in clear contrast to counterpart programmes at UniB. This text thus strikes a keynote for the discursive order to be followed at UniA: a clearly-stated support for a continuity of a *discipline*-based order for curriculum (D+), and by implication a continuity of subject departments as the primary basis of social organization (S+). This does not preclude cross-disciplinary adventures, but serves to protect the established social and discursive order, if necessary.

Having done this, AH2 can now offer various ways in which the coherence of the diverse contents of programmes could be defended (which I illustrate for brevity's sake with just his headings):

1 (a) Phenomenological focus ...
(b) Ontological cognacy ...
2 (a) Problem-based unification ...
(b) Thematically structured ...
(c) Theoretical or conceptual integration ...
(d) Meta-scientific embeddedness (Respondent AH2, 1998: pp. 2-3)

What quickly becomes clear is that the principles of 'coherence' being asserted here are once again approaches consistent with the internal orderings of knowledge in the academy. AH2 is drawing on discourses from the Philosophy of Science to suggest principled ways in which different disciplinary knowledges may be brought into relation with one another for the purposes of programmes. Noticeably absent is the language of vocational or market instrumentality suggested in some of the national policy discourses (see Chapter One). While these extrinsic motivations could possibly be framed in ways consistent with some of AH2's principles (e.g. 2(a) or 2(b)), they are not acknowledged in any way in his documentation, nor in the interviews with him. We have here a senior academic responding very seriously to the policy injunctions, but in a way that aims to strengthen the internal principles governing the integrity of curriculum, rather than opening up to the sway of external controls. The impulse here seems thus to be paradoxically both *responsive* to the external pressures, acknowledging that there may be legitimate grounds for reform, and simultaneously *defensive*, aiming to preserve certain foundational values in the academy.

The logic behind the response is clearly purposive, however. The transformation priority that AH2 references first in his booklet is the global priority of the extent to which contemporary institutions are able to demonstrate "fitness for the new era. Higher education is a vitally important activity in any modern society" (*ibid*: p. 24). Second to this is the local priority of "equity and redress", but as was acknowledged at senior management level (see Chapter Five, and the comments of respondent AH3

later in this chapter), this dimension received scant attention in the activities surrounding this reform. What is required is the need to bring under control an academic faculty that has "grown by accretion over decades, nearly a century" (AH2, p. 17), during which time "academic planning was not done in a holistic way" (Respondent AH2, 1997: p. 25). Strengthening this control would entail introducing some new limits on the autonomy of departments and academics, in other words to bring about a strengthened regulative order within the institution. The process of 'programmatization', then, offers the opportunity to establish a strengthened system of centralised control in the Faculty (and this feature is echoed in other faculties across both institutions under study). This strengthened regime is reflected in what Reed (2002: p. 165) calls a "practical control technology", with a system of programme committees (made up of representatives from participating disciplines) and a central faculty committee (with representatives from the various programme committees), all geared to monitoring the 'performance' of programmes (and thus of the academics who constitute them). These committees also work with sets of standardized documentation for proposing and evaluating programmes, each reflecting a consistent set of criteria established for the Faculty (AH2: p. 15). What is promised here is a strengthened apparatus of centralised control within the institution, playing potentially a much more dominant role than prior institutional procedures for the scrutiny of educational offerings, and supplementing (or, some would argue, working in tension with) the specialist epistemic networks of peer-review which had hitherto assured the integrity of courses and qualifications by means of (for example) external examiners. The goal, it seems, is to supplement a somewhat diffuse system of accountability which rested on tacit, unexamined and diverse values (external collegiality) with a strengthened institutional regime characterized by more explicit criteria (Respondent AH2, 1997: p. 26) – in short, a system of cross-border internal collegial peer review for curriculum purposes. Here the motivation is informed by a management perspective on the institution, which sees powerful strategic needs for the institution to be visibly responsive to government injunctions at a time of sweeping political reform. The intent, here, is to counter a public perception of UniA as being characterized by "institutional conservatism, one of whose forms of expression is a circumspect approach to transformation" (*ibid*: p. 25), while at the same time protecting the institution's historical Afrikaans-medium character.

Thus although AH2 is a leading figure orchestrating the 'responsiveness' of the institution to the policy, he does so in a way that (relative to UniB, as I shall show below) preserves the established social and discursive order of the institution, thus providing an example of a traditionalist (D+, S+) orientation. However, relative to other more conservative traditionalists, the positioning of AH2 within the traditionalist quadrant would be somewhat closer to this quadrant's borders with its more adaptive neighbours. In other words he represents a variant of the traditionalist disposition that is oriented towards adaptive activity geared to sustaining or strengthening fundamental academic order in the face of external pressures, and as a corrective to what is seen as the inherited deficiencies of the past.

But even this traditionalist orientation faces constraints on its ambitions. The highly principled criteria for alternative forms of 'coherence' advanced by AH2 above for the modified discursive order of programmes, however, inevitably come up against contestation and contextual contingencies, and some pragmatic compromises are reached in the implementation. At one level, the discursive bid made by AH2 in his various documents – despite its careful intellectual grounding – fails to resonate equally across the faculty:

> When they found that their old courses were not coherent entities in terms of my – or these desiderata, they would simply reject the notion of coherence and come up with something different. (AH2: p. 7)

At this point, the ambitions of the policy sponsors come up against the residual autonomy and power of the established traditional order and AH2's interpretations find their discursive limits. As a "compromise", the notion of a "working theory" of coherence is developed in the evaluation committees, which acknowledges that relationships of coherence are often "intuitively-felt", and that trying to insist on explicit and consistent criteria across a wide variety of disciplines could have the result that "many people would just walk away at that point" (AH2, pp. 7, 9). This device effectively widens the interpretive space available for judgements on 'coherence', and perhaps weakens the potential basis of strong centralized controls.

At a more pragmatic level, the Humanities Faculty at UniA had in the late 1990's been subject to job-losses as a consequence of a sternly-applied policy of matching

academic posts against student numbers, leading to a considerable sense of insecurity amongst academics. A consequence of this is that a spirit of collegial solidarity and inclusivity becomes another guiding value (as it does under similar circumstances at UniB, as we shall see later) :

> The faculty was being rationalised, so-called downsized, and what I wanted to do, I wanted to try and give as many disciplines or departments [as possible] a bite in this broad new programme. I expected – and it turned out to be right – that that would be where the majority of students would be. (AH2: p. 11)

Thus the process in this faculty of constructing 'responsiveness', and drawing academics into negotiation over curriculum, was initially driven by strategic priorities, both for the faculty in the face of downsizing, and for the institution at a time of political transformation. In pursuing this strategic impulse, however, the emphasis has nevertheless been on affirming and deepening values intrinsic to the academy. The ambition of strengthening centralized controls is mitigated by the residual power of departments, and a continuing spirit of collegial solidarity.

The *second exemplary individual* illustrates another, more conservative, variant of the traditionalist type and provides an example of how even the limited (and traditionally oriented) adaptive ambitions of AH2 are constrained. The second individual (a senior professor in the faculty) is clear about the boundaries between the academy and the outside world, and as an exemplar of a *traditionalist* disposition (D+, S+) explicitly distances himself from the instrumentalism of the labour market:

> We see ourselves as providing a basic general education without trying to be too specific about what society is going to need, and developing packages to fulfil that need. ... We were very careful, very hesitant to make a societal analysis and say "Well this is what we need in society, and now we're going to offer these ways of addressing various needs." ... I don't like this centrist planning of society as far as education is concerned. (AH14: p. 2)

Although this academic concedes that the programmatization process has been fair and well-run, and 'useful' in making the logic of some curricular practices more visible, he takes issue with one of the core regulative principles governing 'coherence', suggesting that the struggle for control over the meaning of the term is

likely to be a continuing issue, notwithstanding AH2's efforts to reach a stable compromise. At the heart of the issue is how the interpretation of 'coherence' impinges on the autonomy, and the internal economy, of departments. The dispute is over the control of the discursive order of the curriculum and concerns whether the content of courses should be judged 'coherent' by the standards of the programme or those of the discipline. In the case of the former, each constituent course of a programme would be customised and unique, with higher cost implications, whilst the latter would enable one course to serve multiple programmes, with consequent efficiencies. In terms of the social order, the former position would render curriculum content ultimately answerable to a multi-disciplinary programme committee, while the latter position would retain control of content within the respective departments. This respondent suggests that this contest over regulative principles is only temporarily resolved:

> My suggestion was that departments should be allowed to make proposals about modules that they would like to offer, ... and then could see in how many programmes one could use that module. ... I was over-ruled, and we decided to go for a very linear approach, every module should be made specially for particular programmes. ... This kind of thing very much depends on who is in control, who has the most say in the development of programmes. But I think eventually we will realise that we can't keep this up. (AH14: pp. 2-3)

Although this academic is closely involved with the restructuring exercise, his disposition remains nevertheless a traditionalist one (D+, S+), being oriented to maintaining the strong discursive and social classifications of the established order, and would thus be positioned in a relatively conservative (non-adaptive) corner of the traditionalist quadrant[28]. One could speculate that his involvement in the restructuring is prompted at least partly by a desire to ensure his own survival (and that of his discipline) in the new dispensation, coming as he does from an historical discipline[29].

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[28] One could differentiate between the two traditionalists identified in this section by coding the 'conservative' AH14 as (D++, S++) and the more 'strategic' AH2 as (D+,S+). However, I do not make these intra-quadrant distinctions consistently in the study, and so will suggest these variants as and when needed.

[29] The historical disciplines, like the classical disciplines and some language disciplines, felt themselves under considerable threat during this period, and numerous such departments were closed or merged in South African universities, including UniA and UniB. For a while it seemed as if History might be omitted from the South African schooling curriculum.

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The participation of other academics in this adaptive activity is prompted by diverse orientations. I will now move to identify these differing, motivations underlying the responses of other academics in the same Faculty, sketching one example each of two further adaptive types. The first individual is an avid boundary-crosser, driven by a strong intellectual motive (*cognitive-adaptive*), and the second is a pedagogic reformer who emerges bruised and disillusioned from the fray (*pedagogic-adaptive*). I show briefly how each of them positions themselves differently in response to the reform, and how each find differing affordances from their involvement in the process.

The *third exemplary individual* celebrates boundaries, just as she celebrates the crossing of them. But boundaries for her signal 'difference' and 'diversity', a range of distinct intellectual resources which, brought into principled combination, promises fresh perspectives for research. Coming from one of the languages, she has positioned herself in a field characterized by theoretical hybridity:

> I come from literary theory. [Boundary-crossing is] the kind of thing I have been doing all along because literary theory feeds on different disciplines, it feeds on philosophy, it feeds on psychology, on sociology, on even geography and ... in my own research, I have been moving across disciplinary boundaries and finding it extremely exhilarating, I enjoy doing that. (AH4: p. 3)

In contrast to the prior respondent (AH14), this academic is excited by the temporary destabilization of the social order in the institution, by the cross-border possibilities opened up by the restructuring process, but her interest is an intellectual one, rather than one motivated by the instrumental goals of the policy, or by the strategic concerns that preoccupied AH2 above. The (temporarily) modified social order (S-) enables her to express the connective dispositions that arise from her existing disciplinary socialization, without needing to modify the internal discursive order of the curriculum (D+):

> I think that that whole process of inter-disciplinary discussion, inter-disciplinary approaches, has been precipitated, strengthened perhaps, by the whole process of [programmatization]. We know much more about each other now that we did before. ... I don't think the [curriculum] ... or the BA that the student will get in the end, is radically different

> structurally, because they still do five subjects in the first year, four [in the second year], and two and a half in third year. ... I think structurally our Programmes are not that different from what a student could do before, but they are more focused, they are more coherent. ... I think the more radical, or the more challenging thing about the [programmatization process] is really to broaden the intellectual horizon within disciplines. ... For me the more radical changes are the intellectual ones, not the structural ones. (AH4: p7)

She concedes that the basis for widespread on-going intellectual collaboration between the disciplines is still only a possibility for the future, but she gives an example of one such emerging collaboration between her language-based department and another department, a project that has become possible because of a growing number of academics who share a connective motivation rooted in intellectual developments within the landscapes of disciplines:

> One has also got to take into account the changes that have taken place in the Faculty over the years with younger people moving in. I gather that, before, [the other department's] disciplinary boundaries were quite strict, ... they were not that eager to reach out towards other disciplines. ... But I think with younger people moving in, coming from ... a different kind of intellectual sphere generated over the last fifteen or twenty years, they are more outward looking. ... We are speaking of working together with them on [a project with] some of the [local] communities, with farm workers, and exploring the possibilities of narrative. And we'll be able to come in from the side of literature, helping them explore the possibilities of using narrative as a way of formulating experiences, working through trauma, or whatever. So I think there is definitely a kind of a broadening out of the discipline. (AH4: pp. 6-7)

She notes that the organizational structures of subject departments do not reflect the theoretical proliferation of recent decades:

> There used to be - maybe ten, fifteen or twenty years ago - a system where you had [a language] Department following a certain approach, the 'New Critical' approach, and that was the only one. But that is really a thing of the past. The approaches are much more heterogeneous [now] and I think if you take it down to basics, some of those approaches rest on very very different epistemologies. ... You can approach literary texts or cultural texts from a structuralist view point, from a post-structuralist view point, from a feminist, from a colonial, a post-colonial, from the viewpoint of discourse analysis, and a Marxist approach, a gender approach, all those different fields. And I think if you really take

> them back to their basics, some of them would rest on different epistemologies. (AH4: pp. 5-6)

This heterogeneity requires, in her view, a social order that involves very collegial, inclusive and consultative approaches to management in the Faculty, in contrast (she implies) to the more hierarchical procedures of the past, and in contrast to the centralised powers that some would like to see given to programme convenors for the purposes of accountability to instrumental ends. Consistent with this, she would like to see the formal organizational structures of the academy following, rather than attempting to lead, the directions that intellectual developments must take:

> Some people say if you retain the departments you retain disciplinary boundaries. But again I feel that it is a structural argument. I think the true responsibility for change lies at an *intellectual* level. It doesn't matter if you have structures which accommodate working together and democratic processes, if it's not there intellectually. Content rather than structure, for me. That's my argument. ... I think it is because of who I am and because of the discipline in which I am and my viewpoints, my epistemology, or epistemol*ogies*. (AH4: pp. 12-13. Respondent's emphasis)

In short, this academic represents a classic instance of a strongly socially connective orientation, one that is driven from her discursive home, the intellectual or *cognitive* inclinations of her disciplinary base, and which is alive in her intellectual practices as an academic. She does not seek to change the particular discursive order in which she is personally located (this is, for her, a dynamic field already), but rather seeks to modify her social relations with academics in other disciplinary areas so as to give effect to the inherent hybridity of her own disciplinary socialization. Her positionality as a *cognitive-adaptive* would thus attract a (D+, S-) coding.

By contrast, the *fourth exemplary individual*, also from a language department, is strongly motivated by issues of transformation and pedagogy, and is an exemplar of the *pedagogic-adaptive* type. Although also deeply involved in the restructuring process, she ultimately presents a bleaker view of its achievements. At the outset, she declares her orientation quite explicitly, together with her projections for a social equity agenda that, in her view, should be advanced by the reform:

> All along I have hoped that [UniA] would transform in ways that would make it more possible for black students to come there. It has become, again, quite a personal thing. I have felt demoralised by the fact that the whole of South Africa was changing and grappling with change, and so on, and that we [at UniA], to a very large extent, were just carrying on as before. ... So one thought that maybe the programmes [would have the result] that all academic development[30] would be integrated, and integrated into programme development as well - that would actually help towards transformation. (AH3: p. 1)

For her, transformation is both about increasing access for once-excluded groups as well as focusing the curriculum on issues of social justice so that the graduate output of the programme would be 'critical citizens'. Both of these projects arise from her own research and teaching interests in sociolinguistics, especially "language and power issues" (AH3, p. 6). Academic development work typically involves the restructuring of the discursive order *within* a discipline in order to maximise performance from a diverse student constituency, a disposition that would be coded (D-, S+). With an established prior history of leading her department's work on academic development projects to promote access for black students, she is drawn into the programmatization process, but with an uncertain legitimacy:

> I actually enjoy the whole business of structuring and trying to work out systems that I think will work better than the traditional systems. I've been very active in my own department, in that kind of work. It also came at a time when I wasn't going to do literary research, or anything like that. ... So the programmes opportunity came, and although no-one ever said to me "You do it," I found myself more and more drawn into the whole process – committees and all that – and it was really, again, quite arbitrary. The department never sat down and decided "These are going to be our programme people". I just became [one of two people who did this]. (AH3: p. 7)

Although her primary interest is in the access and equity possibilities of curriculum restructuring, this dimension trails in the wake of her department's priority to position itself advantageously in the restructuring exercise, and she becomes an agent for this

[30] In South Africa the term 'academic development' refers to the work done in (especially formerly predominantly white) higher education institutions to include, and promote the success of, black students, most of whom had experiences disadvantaged schooling. Academic development was pursued initially through direct support for such students and later also through curriculum modifications designed to assist students with differing levels of academic preparedness to succeed.

latter (at best, cognitive-adaptive) agenda, and is propelled into the cross-boundary negotiations. At the outset, she finds this a rewarding experience:

> I found it very exciting that we were going to get people from [another department] to work with us. ... It was incredibly amiable and really exciting. ... It was the first time that we co-operated so closely with another department. ... Probably the most exciting part of the programme thing is the possibility of working with other departments and getting out of your own little mould. (AH3: pp. 4, 6, 7)

Although she conducts this work in close partnership with her head of department, her extensive, detailed and "amiable" negotiations with a neighbouring department ultimately founder on the reef of institutional economics. The institution has an established system of calculating the staffing complement of a department according to student enrolments on that department's courses, and in fact had used this formula in recent years to justify job cuts in this Faculty. It seems there was a lack of clarity about how this system would operate in the programmes dispensation:

> Everything was in turmoil and no clear guidelines had been given about how points were going to be calculated or shared. We decided that this was the time to try and experiment with this kind of thing, because we didn't think that any rules would be so strictly applied or that we might lose staff, because we were doing exactly what programmes were designed for – getting people to work more closely together. ... Because we couldn't believe that while they were encouraging us to work with other departments, they would hold it against us and just slash our points or start taking away our staff because we [had agreed that another department could teach on our courses]. (AH3: p. 6)

Once it emerges that the old system will persist, strong traditional territorial impulses within her department re-assert themselves:

> But when people started making cold calculations, the rest of the staff felt as though we had sold them out. There was the sense that - and this was the kind of language that was used - that [staff in the other department] were just being imperialistic, that they were trying to get their hands on our students, that they had always wanted to take us over. There was talk of "the takeover", that this was the thin edge of the wedge, that I was a complete fool to have trusted these very, very dangerous people. So we just scrapped implementation. (AH3: p. 6)

This individual participates in the programmes exercise motivated by the pedagogic-adaptive disposition, but these motives are quickly superseded by the larger strategic agenda of her department, firstly to conduct cross-border negotiations, and then to withdraw from them. She realizes belatedly that the particular discourses surrounding programmatization at UniA are unlikely to advance the social justice projects which inform her pedagogically-motivated disposition:

> [The] programme language so frequently works in economic terms and it clashed so much with the whole business of equity, for instance. At [UniA], that's huge. The equity side is completely hidden. Not hidden, but non-existent. Especially the position of academic development becomes frequently fraught because in academic development, you are never going to ***make*** your money. It's not an entrepreneurial exercise. It is something that you actually have to put your money ***into***. It's not going to make you money. (AH3: p. 24. Respondent's emphasis)

This individual's sense of betrayal is deepened when she learns that another dimension of the economics of academic life also remains unchanged. Her extensive personal investment in the curriculum restructuring process (and thus her identity as an academic development specialist) is not to be acknowledged as legitimate for the purposes of the reward system:

> I didn't feel that I benefited in any way from working on programme stuff. It was work that was completely invisible. I was very angry about that, because it felt as if it was very, very necessary work, but in the end, the university [only recognizes] ... research and teaching. Mainly research. Learning about programmes and finding out about what other places are doing and trying to look into a pedagogy that could underpin your programme's development is not regarded as research. ... I didn't do it for promotion purposes, but I thought that it would be part of the whole thing. I thought that it would be very necessary work, and also a lot of responsibility. (AH3: p.12)

The pedagogic revolution that she has hoped for, and the discourses that sponsor it, enjoy little support in the mainstream academic constituency, and thus her disposition is a vulnerable one. Illustrating the high cost of personal investment in what turns out to be (in her terms) a failed adaptive initiative, she explains she has withdrawn from further involvement in any restructuring projects, and the following year she leaves for another university.

> Work always becomes personal for me. I don't seem to be able to keep 'personal' out of it. ... But I can see that as individuals that we were positioned impossibly by the tasks that were required. I think it would have been very strange for people to have come through the whole thing completely unscathed, because there was so much insecurity and vagueness and posturing. (AH3: p. 25-26)

The process of curriculum restructuring in this context, then, has provided what seemed to some as a time for the temporary suspension of some of the rules and boundaries of an old order, and an opportunity for a possible reconfiguration of values and practices towards a new order. A variety of motivations, defensive and connective, prompt the involvement of academics in the process. However the traditional order – that of the ongoing primacy of disciplines, and of majors, as the building blocks of curriculum – is defended from the outset by the influential AH2, a figure who straddles management and academic roles. Even though their autonomy is not wholly unscathed (constituent modules will, here and there, need to acknowledge the purposes of the programmes within which they are embedded), departments remain the primary unit of organization, and their inner discursive logic (and social hierarchies) thus continue to be the main mechanism for the distribution of resources, and for the definition of practices. It remains to be seen to what extent the newly-established programme-based structures of centralised control will be able to call this traditional discursive and social order to account. Although the architecture of the past has been largely sustained in this way, the brief period of destabilization has, however, brought rewards for the cognitive-adaptives who found opportunities to fulfil their inclination for border-crossing and to assert the legitimacy of once-marginal hybrid knowledges. Like AH4 above, they found solidarity with fellow-travellers in other departments, and perceive themselves to have strengthened their relative positions within their departmental fields. These are victories for their personal intellectual identities, a gain that is not diminished by the fact it finds little reflection in interdisciplinary curriculum, since that would have entailed prohibitively high costs. By contrast, the pedagogic-adaptive, hoping for a deeper-seated reform of fundamental values that would widen the distributive reach of curriculum, instead retreats disappointed.

In summary, I have used the case of the *BA in Humanities* to illustrate three of the four ideal types of identity dispositions that characterise this episode of reform. What

becomes clear from each individual's narrative, however, is that the identity dispositions they project in relation to the curriculum restructuring tend to be *aspirational*, rather than substantively achieved. Three of the four individuals enter the reconstructive fray with clear, if differing, adaptive motivations (a strategic variant of the traditionalist type, as well as cognitive- and pedagogic-adaptive types), but each of these motivations finds, at best, only limited fulfilment. Their adaptive ambitions come up against obstacles of established or divergent interests of the wider community of academics, and an accommodation must be found. The cognitive and traditionalist dispositions come off best, while the pedagogic orientation finds little space for its adaptive ambitions. The fourth individual (who, as a 'conservative' traditionalist, is a reluctant adaptive) has to reconcile his insular disposition to the reconstructive order of the day, and must be content to wait for the new arrangements, as he hopes, to unravel. This aspirational quality to adaptive dispositions is one that will be repeated in subsequent cases in this study, and is to be accounted for in at least two ways. Firstly, data-gathering for this project was conducted in the relatively early stages, and focused on a limited dimension, of a much wider and more comprehensive reform of the higher education sector. The extent to which the various dimensions of the reform will take root and reinforce one-another, securing the space for adaptive initiatives, remains to be seen. Secondly, the adaptive dispositions projected by the respondents chosen for this study represent a relative minority within their respective institutions, and it is thus not surprising that they encounter structural constraints on their agency, the enabling environment of the restructuring policy notwithstanding.

6.3 The Film, Media, and Visual Studies Programme at UniB

As was noted earlier, *Film, Media, and Visual Studies* is in fact a 'stream' of the larger *Cultural and Literary Studies* programme in the Humanities Faculty at UniB. In this Faculty an attempt has been made to implement a model of programme which weakens the discursive order of disciplines, and modifies the social order between academics, more radically than was the case in UniA. Whereas in UniA, the discipline and the major remains the core building block for curriculum, in this Faculty at UniB the notion of a disciplinary 'major' has been dispensed with. Instead programmes are constructed from a variety of modular contributions from various disciplines, focused on the proposed graduate output of the programme. This results in a model of

programme structure that is relatively restrictive of student choice. In terms of student enrolments, however, the *FMVS* stream has been very successful, attracting more students than the other three streams of this programme put together.

This case study focuses on the *Film, Media and Visual Studies (FMVS)* stream because of the widely held perceptions within the Faculty that it was characterized by strong adaptive commitments on the part of academics associated with it. The adaptive character of the *FMVS* is reflected in its multi- and/or interdisciplinary features, and its orientation towards newly-regionalizing fields of study, especially Film Studies and Media Studies, fields not formally represented at UniB in the past in the shape of departments. The *FMVS* is thus an attempt to instantiate these new regions (film studies and media studies) at UniB in curricular form. The stream draws together contributions from academic staff from various departments including English, History, Modern and Classical Languages, and History of Art, consolidating pockets of expertise that had previously been located in separate disciplinary and departmental contexts and which had found curricular form in the past in occasional elective courses.

New, 'interdisciplinary'[31] courses have been purpose-designed for the *FMVS* stream, although pre-existing courses from various disciplines are also included. The programme as a whole has a series of compulsory interdisciplinary core courses running from first to third year, offering a 'backbone' for the programme, and taught by staff from a range of disciplines. The interdisciplinary or multidisciplinary courses and the extensive negotiations across departmental borders suggest that, compared to the UniA programme above, there has clearly been a more extensive attempt to modify the discursive and social order.

The particular definition of 'coherence' adopted in this context is one which aims for a relatively high degree of co-ordination amongst the contributing academics. This involves a shift in the division of academic labour from high levels of autonomy for individual self-regulating academics to a situation where, in theory, academics are

[31] These courses are referred to as 'interdisciplinary' by some respondents, but the extent to which these are really interdisciplinary, rather than multidisciplinary, is contested, as is the role these courses play in the stream as a whole. These points will be illustrated in the subsequent discussion.

called to be collectively responsible for the success of the whole, and thus to tailor their contributions to the curriculum accordingly. In this context, intellectual coherence requires the weakening of individual autonomies in the interests of an overarching project. The difficulty of achieving this discursive and social re-ordering is reflected in the attempts to construct and deliver interdisciplinary courses, where (ideally) idiosyncratic recontextualizing principles should give way to common ones. A convenor of one such course comments as follows:

> The core course ... has had immense problems. ... We were very clear in our heads what we were about when we designed it, but of course many a slip between the idea and the implementation of it. It's been very, very tough. ... It brings in a range of teachers from different departments. It's modular - so how would you make sure that the cohesion is there, that the opening up of issues is clear as they develop one into the other? ... The lecturers are going to have to work much harder to make the links clear. ... One of the big administrative nightmares [is] getting people from different departments to pull together. They are all very willing to take part - "I'll come in and do my two lectures on whatever, that I've done forever," and that isn't the way the course works. [It's a problem of] fragmentation, people coming in and doing their own thing and waltzing off again, students being left to make connections as best they can. (BH1: p. 3).

Achieving coherence (or overcoming the fragmentation) is thus both an intellectual and social project, and illustrates the problem of curricularising a new region. One dimension of this fragmentation is the incommensurate pedagogic and epistemological approaches upheld by colleagues teaching on the same course, aligned as they are to differing discursive and social orientations. One respondent illustrates very clearly the pedagogic-adaptive orientation, developed in the past within his own departmental setting (S+) where the discursive order is modified according to pedagogic principles (D-):

> I think that my experience of teaching is that it often takes quite a long time to build up a relationship with colleagues, whether within the department or outside, where you in a sense get to learn how you can work with each other. ... But a group of us emerged, [names them], who were very committed to team teaching, to listening to one another and to making the time to go to meetings, to briefing tutors, to selecting tutors quite carefully. And so in a way, there were a group of us who taught very closely to each other and when we evolved other courses, ... we would do it in the same sort of way, spend a great deal of time preparing the course, a great deal of meetings, particularly in the first year of the course, a great deal of feedback and thinking about what had gone

> wrong, what had worked, at the end of the course, ... a group of people within that department who took teaching very seriously, I think. ... Now there were other colleagues who haven't, I think, perhaps had the same sort of approach, ... other colleagues for whom it was very difficult, I think, for all sorts of reasons - personality reasons, research-before-teaching reasons. (BH4: p. 2).

This individual aspires to repeat this approach to regulating the discursive order within what he takes to be the new social order of the FMVS construct. But not all colleagues drawn into the *FMVS* programme share this disposition, and some tend to resist relinquishing their autonomy: "So it might be quite hard to get a colleague to do anything beyond appearing, giving the lecture and disappearing, perhaps e-mailing you the odd reading list, but not actually particularly wanting to come to meetings, and also very much protecting their own turf" (BH4: p. 1). More seriously, the cleavages also arise from the differing disciplinary socializations of the individuals concerned. The convenor of an interdisciplinary course comments:

> The individual might believe, for instance, that their understanding of how to analyse film is the only one or the only correct one..... [They] would see somebody else as watering down and doing a disservice to the students in taking a different approach - say a semiotic approach as opposed to a psycho-analytical approach to a reading of film. ... So you might find a colleague - you are trying to do a fairly broad second-year survey course and one has tried to go around to everybody individually if they won't come to a collective meeting - and suggest that we all say something about the history of the society which is producing these films, we all say something about the history of the film industry which is producing the text, as well as saying something about the nature of the films that are produced. We all, in a sense, at least agree that we are going to do that. But you will still find somebody who won't want to do that, who will want to do a particularly close reading of a film for instance, because that is the way that they like teaching [film], and believes that the rest ... would be superficial and not getting enough in-depth analysis for the students - that would be their argument. Whereas, as a course convenor, you are trying to say, "Well look, second-year students, they need context and they need some sort of similarity of approach, whatever you actually do with the film when you get to them". So that sort of problem. (BH4: pp. 4-5)

Here an individual projecting a pedagogic-adaptive disposition (D-, S+) attempts to establish a unifying discursive order (requiring all to subordinate their discourses to the common project) across the varying disciplinary specialisms that contribute to the course. His effort is resisted by cognitive-adaptive individuals who are pleased to

participate in the modified social order of the new curriculum construct, but who protect their discursive insulations (D+, S-). These two dispositions thus appear to be in considerable tension with one another.

A further divergence is to be found between the inward-looking dispositions of the cognitive-adaptives, and the outward-looking orientation of the market-adaptives who seek to regulate their discursive order from the signals provided by the market. Bernstein (1996: pp. 65-66) notes that regions, like the two faces of a coin, simultaneously face inwards towards disciplinary bases, and outwards towards fields of practice. Within the *FMVS* stream, the respective balance between these two gazes differs across fractions within the stream. On the one hand the cognitive-adaptives face predominantly inwards towards their traditional epistemological commitments, and academics structure theory-led learning geared toward the production of a generalised 'critical citizen'. On the other hand the market-adaptives face predominantly outwards towards specific fields of vocational practice, and structure practice-led learning geared toward the production of vocationally-skilled graduates. The tension between these two dispositions is reflected in the account below:

> [These are] people with very different theoretical approaches to how it should be taught ... [One senior academic] for example, is very strong on the pragmatic side of things: "We are training media practitioners and to infuse your courses with a lot of intellectualisation and theory and what-nots is highly suspect. These kids want to go out there and be journalists and movie-makers, and we have to build up an equipment pool and we've got to teach them how to do these things". And then you get other people saying "This is not a technikon, this is a university, and they must do literature and language and cultural studies-type things, along with the film and media. They must theorise what they do. Yes, they can go out and be marvellous film-makers but if they are coming out of a university, you want them to be able to have the self-reflexive approach to their work." So that is a major area of contention. (BH1: p. 15)

Significantly, there is a claim from the dominant academic representing the pragmatic or market-led fraction (media studies) that the content of the programme's compulsory core courses (which tend to be theory-led courses assembled in the main by cognitive-adaptive types) do not serve the needs of students choosing the media studies options. Instead, this academic articulates his externally-focused stance as

follows, showing how, in his view, the discursive order of media studies courses should be guided by principles recruited from the market:

> Part of my thinking was that we need to look at what the media industries here are doing, what they need, get our students to go into the industry in the holidays. ... So my feeling was very much that we say to students, you need a good academic basis, but in addition to that you need to be using that free time to work [in the industry]. ... You have to learn the technique to be able to do academically interesting things. If you learn to write a website properly, then you can start doing interesting things with it. You can start doing multi-media in a creative way. You can start pushing intellectual boundaries, making new intellectual connections. ... I think that, to me, is the interesting challenge. Not just to make them use the industry software, but to use that in an interesting way. So I think that is the challenge for the university - we can't ignore what the industry standard is, we can't ignore the skills and the training that people need, but how we incorporate that into a bigger package. ... Because the media industry has told me, you get these students from [another university] and you say "What have you written?" and they say, "Oh I wrote an essay." And the industry says fuck off, they are not interested. What they want, is someone who has done something else. (BH3: pp. 2, 15)

This particular adaptation of the discursive order is necessarily paralleled by modifications also in his social order. Rather than recruiting colleagues within the institution to teach in the Media Studies-related courses, he tends to draw on industry professionals instead. The strength of the potential social cleavage from his erstwhile colleagues is suggested when he tells how he is tempted to take his segment of the stream out and establish it as a separate programme altogether, perhaps even moving it into the Commerce Faculty. This individual represents a classic instance of an adaptive disposition oriented towards the market, where both the traditional discursive and social orders are to be modified (D-, S-). Here we see this pragmatic adaptive disposition working alongside other adaptive dispositions already identified (the cognitive-adaptive D+, S-, and pedagogic-adaptive D-, S+), orientations that are significantly at odds with each other. Given these divergent dispositions, which reference differing regionalising fields of knowledge, which call on different principles for ordering curriculum, and which look to differing social allegiances, it is not difficult to predict that the social grouping, and the curricular business it must sustain, will be characterized by tension and conflict.

These academics with varying orientations, however, come together into a programme grouping in an institutional context which places additional stressors on a collective whose dispositional architecture is already structured for instability. In this setting, two broad contextual conditions are frequently invoked in the interviews as factors shaping the programmatization process: these were, firstly, a scramble for survival in a climate of threatened job-cuts and, secondly, pressures brought on by the speed with which the policy was implemented. The first of these was prompted by the widespread perception that the policy of programmes would be used as a stalking horse for retrenchments.

> There was an obvious understanding that this was about rationalisation as well as programmes. There was an understanding very soon that actually it was also about seeing which departments actually weren't viable. (BH4: p. 5)

The consequence of this perception in this context was not always to deepen the competitive dynamic; it also had the effect in some cases of strengthening collegial inclusiveness, leading to the inclusion in programme courses of colleagues (and their disciplinary specialisms) who were thought to be threatened. In these cases (and *FMVS* is one of them), the normal discursive principle for inclusion in a curriculum (i.e. cognitive compatibility with the purpose of the curriculum) is trumped by a social principle (*defensive collegiality* in the face of threatened job cuts):

> There, again, I think this is where there might be something of a clash between an ideal academic model and the continuation of collegiality, not shafting your colleagues, not playing into the hands of the [Administration] gang, which was all about actually making us all redundant. So I think [the convenor] has been very concerned to include Classics, for instance. (BH4: p. 5)

Many academics felt their disciplines (and hence their own jobs) to be under threat, and this often resulted in them looking for opportunities to participate in as many programmes as possible, sometimes over and above where they felt they had a genuine academic and educational contribution to make. The combination of pursuing substantive innovation in their legitimate disciplinary directions as well as additional service teaching "purely to defend the future of our discipline" (BH5) results in a self-confessed fragmentation of teaching as some individuals become committed across an

unsustainable number of contexts. An inevitable consequence of this is a perception by some academics in the programme that defensive collegiality is a threat to competitive or *critical collegiality*, that is the collegiality whose purpose is to ensure the integrity of the discourse. In other words the weakening of the social order in this way threatens the integrity of the discursive order:

> So they might have to have people teaching who have never taught film before. Now that doesn't mean that they can't be really good at it, you know, and that they can't learn about it and develop expertise in it, but you'd actually have to have a kind of a programme of internal retooling to make that work in an academically responsible way. If you care about the academic integrity of something like film, then it should have a very straight forward academic structure, some sort of Board where decisions are made, you know, and some recognition that some people have expertise and others don't, and that you might want to get expertise and you can work on that. But you can't just have people thinking, you know, in the situation of threats to jobs, well maybe I had better start teaching film. (BH2: p. 6)

The restructuring process displaces the traditional approaches of subjecting academic practices to peer review within a specialist epistemic community. This defensive strategy is also prompted by the second contextual contingency, which is the speed of implementation of the new policy, requiring the entire range of Faculty offerings to be transformed into programmes in a single sweep of restructuring. The combination of the pressure of time, and the desire to protect colleagues from retrenchment, influenced recontextualisation decisions:

> The second thing that was difficult was the speed with which we had to do it all. We had to suddenly introduce it almost overnight, so how could you do anything other than, in a way, build up on what, to a large extent, was already there. And once you do that, you might well not be introducing - you know, you rationalise *post facto*: "Of course it makes sense to have Odysseus and the Classical World or whatever, as a crucial component of your [programme]". But whether that actually is the case is another matter. There is a degree of collegiality left to the extent which people don't want to destroy the livelihoods of colleagues. There are some very good teachers in classics, and do you want to destroy their careers? Which you would do, perhaps, if you said "Well, that contribution isn't [appropriate for this programme]". (BH4: p. 7)

What becomes visible here is how the rapid modification of the discursive and social orders in this context set up precarious conditions for the new construct. Attempting

to change the discursive order from the disciplinary singulars of the contributing academics' home departments to the regions represented by Film or Media Studies creates a crisis for competitive or critical collegiality because the rules for adjudicating discursive disagreements become increasingly obscure, as the battles over the theory-skills debate, and over the role of the core courses illustrates. Equally, changing the social order by being as inclusive as possible creates a crisis for collaborative collegial relations because the criteria for inclusion and membership become obscure or contested, as the disquiet over the readiness of some colleagues to teach on the programme illustrates. If this adaptation had evolved more slowly, enabling the new orders to establish themselves in more clearly principled ways, it might promise greater stability.

The speed[32] of the adaptive activity also brings to the fore the issue of resources. In this context, resourcing includes not only recurrent financial resources and reward systems but also the limited personal resources of academics involved in the adaptive activity: their time, trust, expertise, motivations, leadership and their willingness to drive and endure transitions in the knowledge that their investment will contribute to securing and strengthening their identity and status in the institution or field. This could be termed 'adaptive capital', a subset of Muller's (2001) 'managerial capital'.

This adaptive capital is in limited supply, and is easily exhausted. This is because the rules and relationships that are secure in a traditionalist (D+, S+) setting can no longer be taken for granted and have to be negotiated and defended in every direction. Consequently, the issue of the speed of implementation is a universal complaint from respondents (across both institutions, but more so at UniB), with widespread testimony that what should be an academically-driven programme construction process has been subverted by compromise, contingency, short-cuts, a lack of resourcing and – eventually – a great deal of exhaustion and cynicism. One respondent summed it up as "a botched revolution" which involved "academic gerrymandering" to unsatisfactorily resolve competing interests. Although the (fragile

[32] Top management at UniB initially planned an 'incremental' approach to programmatization, which would have entailed implementing a few pilot programmes first. However, management then decided instead to follow what they initially called a 'big bang' approach (later altered to 'the crest of the wave'), which required simultaneous wholesale change across the institution.

and unstable) basis for a new community of practice has been put in place, the social contract which structures the larger institutional community may have been shaken:

> And I think that many of us feel quite angry about the bureaucratic nature of that procedure and the fairly arbitrary rules that were introduced, the judgement and expectations from people who knew nothing about our disciplines, [who] came in and announced ... what ought to and ought not to be done. (BH3: p. 3)

The data also illustrate vividly the high costs associated with the 'big bang' model of adaptation, and these are incurred in at least two broad forms. The *first* is the process of attempting to produce and maintain discursive consensus. This involves forging agreement on the purposes of the programme or stream, establishing the principles framing the disciplinary and interdisciplinary components of the programme, and agreeing on a common model of pedagogy. This requires a deep investment of time and expertise, not only to establish the consensus within the new community of academics, but also to maintain it as it is tested over time. Respondents remarked on the high cost in terms of time spent in countless meetings at programme, stream and course levels, the cost in terms of levels of personal stress, as well as professional prejudice arising from less time spent on research. Further, the interdisciplinary core courses required a teaching-intensive model of pedagogy, and core course convenors spoke wearily of having to go from department to department to plead for staff to tutor on these courses, lacking the formal authority to require – or the resources to buy – such staffing. The *second* source of cost arises from trying to maintain the social solidarity, to construct an ongoing, stable community of academics associated with the programme. Since the problem of the multiple epistemological and pedagogic orientations of a diverse group of academic staff is not to be resolved quickly, if ever, the tensions need to be managed and contained, a cost incurred at both individual and programme leadership levels.

Apart from the adaptive capital of academics disposed towards change, the management of such a large and complex community of practice requires that the new social order be formalized in a strong organisational base, able to command both authority and resources. It is clear from the interviews that the organisational and resource requirements for this model have yet to be fulfilled.

> One of the key weaknesses, the key botched revolution of programmes, is there is no administrative centre, there is no funding centre, there is no library-ordering centre associated with programmes. There are only departments. ... Yes, we were promised that programmes would lead to redistribution of resources, and that hasn't happened. We were promised that there would be administrative resources for programmes and that hasn't happened. (BH3: p.3)

A senior faculty administrator commented:

> That's why the big interdisciplinary programmes can't run, because we can't agree on resourcing on any basis other than a departmental one. (BH9: p. 1)

The universal complaint from staff associated with programmes of this nature at UniB is of personal exhaustion as a result of the programme development and delivery processes, and the difficulty of staffing the programme or stream adequately. Whilst many committed teachers invested heavily in the interdisciplinary work at first, some of these are now expressing wariness, and weariness[33], about their continuing involvement. A senior figure in the programme, an academic who feels a great deal of intellectual excitement about the interdisciplinary opportunities provided in the programme, commented as follows:

> I feel increasingly being totally under-resourced, especially in this stream. ... I begged [the deputy Dean] for more money for tutors. ... I can't cope with my workload at the moment – many people feel like this. ... We prepared these programmes under so much pressure, and we didn't realise the implications, and now we're stuck with unreasonable demands. (BH7: p. 9)

The lack of a formalized organizational base thus may work to deplete the adaptive capital of individual academics more rapidly. There is now also increasing critical

[33] In writing about the costs of the competence model, Bernstein notes: "There is a range of hidden costs if the competence model is to be successful in its own terms. The hidden costs are time based. The teacher often has to construct the pedagogic resources ... Within the institution extensive interaction between teachers over the practice is required for purposes of planning and monitoring, as the structure is constructed rather than received. These hidden costs are rarely explicitly recognized and built into budgets, but charged to the individual communities of teachers. This lack of recognition of hidden costs may lead to ineffective pedagogic practice because of the demands of the practice, or if these are met, the lack of recognition may give rise to ineffectiveness because of the fatigue of the teachers" (1996: 62 – 3).

debate in the programme about the success of the interdisciplinary core courses provided for the programme. Whilst many see these as exciting sites for intellectual exchange and growth in the Faculty, they also acknowledge that these courses are fragmented, and that their service function in the programme is unclear. They see that a great deal of further careful planning and co-ordination across the whole programme community would be required to correct this. Some question whether they have the personal resources to invest further, and more importantly, there is a perception of a lack of support or acknowledgement from the institution's executive for the new formation.

What begins to emerge, then, is a sense that the social base (including the discursive alignments and resource flows) necessary to ensure a system of significantly altered curricular practices is not yet in place, potentially threatening the integrity of the adaptation:

> [There] is the problem of management if you like. You know, not only did Programmes have no specific administrative resources, but they don't have a formal structure for authority and responsibility, which means that anyone can do what they like really, which in some ways is okay, but in other ways it means it is difficult to plan a coherent Programme or, again it comes to the question of *who* decides what a coherent Programme is. You know when you try and pull together people from many different disciplines, oddly enough what they want to do is teach their discipline. ... And I think this happened quite a lot with the Programmes you know. Whoever turned up at a meeting, put things together, you know, which is not an academically responsible way to put things together. I mean there are the people who went to as many meetings as possible and are willing to do things and in some ways that is good from their part, but in broader terms, in fact it's academically irresponsible for things to be put together in such a haphazard way ... that make it more of a hodge-podge than even before. ... [When] you set up an inter-disciplinary Programme, [you have] people with very, very varied expertise, experience and so on and it's not a *primus inter pares* – first amongst equals – situation because it is inter-disciplinary ... you don't really have a basis for making decisions, apart from who happens to turn up at a meeting. That's potentially not a good thing. ... That's what's both liberating and potentially dangerous about the situation where we are at now. You know, the liberation that people are exploring new things to teach, and that can be good, or it can be bad. ...But what troubles me is that the structures to make it good don't seem to exist. (BH2: pp. 8-9)

Although the policy has opened up the space for some academics to voice their aspirations for changing social and discursive arrangements (towards more connective relations and regionalising forms of knowledge), and although this grouping at UniB have converged around regionalising knowledge fields, we see that the new collective is not based on a set of secure agreements about what knowledge is to be prioritized, nor even about which academics should legitimately be included in the grouping, and is thus not yet a platform to sustain a stable adaptive identity. The dispositions projected by the respondents in this case are thus also aspirational rather than substantively achieved. Further, the very high costs (personal and organizational) associated with destabilizing both the discursive and social order threaten to erode the willingness of academics to pursue the adaptation in the medium- to long-term.

6.4 Conclusion

The two case studies presented in this section focus on adaptively-oriented academics associated with programmes which encompass a range of humanities disciplines, and I have analysed the varying adaptive orientations according to whether the individuals concerned have prioritised their adaptive aspirations in discursive terms, or social terms, or both. I have shown how differing priorities and motivations constitute different dispositions (the traditionalist disposition, and the cognitive-, pedagogic- and market-adaptive dispositions), but that, as yet, some of these dispositions remain largely aspirational since the conditions are not (yet) in place which would enable these academics to give full effect to their adaptive inclinations. The policies provide a pretext for adaptive behaviour, but the adaptation itself is shaped by local contingencies.

However, the presence of academics with these differing inclinations in the same programme grouping is a source of tension because of the differing values and priorities which constitute these dispositions. It seems, though, that these differing inclinations seem to have come less visibly into conflict in the UniA programme than in its UniB counterpart. This may be because, of the two contexts, disciplinary and departmental boundaries were less destabilized in the context of the *Humanities* programme at UniA than they were at UniB, for two reasons, one discursive and one social. The first, discursive, reason has to do with the fact that in the UniA context,

the disciplinary *singulars* remained the dominant cognitive base for academic identities, and negotiations concerned the placement of disciplines within one or another programme or programme stream. By contrast, negotiations in the UniB context of *FMVS* were referencing *regionalising* knowledge fields, rather than established disciplines, and indeed more than one of these (film studies and media studies being the dominant ones). Academics were thus needing to position themselves within fields of study which were epistemologically diverse, which had not previously been formally established in the institution, and whose future in the institution was uncertain[34]. The second, social, reason for the differing levels of destabilization across the two contexts was a consequence of the different cognitive territories on which the restructuring was taking place, and involved differences in who the negotiating partners were in each case, and the unit of currency being traded. At UniA, by and large, *departments* negotiated a place for their disciplines (in the shape of majors) in programmes, while in *FMVS* at UniB *individual academics* had to negotiate the inclusion of their courses in programmes, or of their specialism in programme courses. In this way, both the traditional discursive and social order at UniB were comparatively more destabilized, while the principles for the reformed order remained ambiguous, at a time when academics needed to establish themselves in the new order to ensure their survival. A further problem associated with the rapid destabilization of order, and an uncertainty about the new order, is the extent to which what I have called adaptive capacity is depleted, especially when the resourcing and organizational demands of adaptive initiatives are underprovided for. While this was a common complaint across both sites, again the UniB context seems to have been more deeply affected than UniA.

In the next chapter I consider another pair of programmes from the context of the humanities, this time where both programmes explicitly reference the same regionalising area of study, development studies.

[34] Some respondents record their perceptions that a senior figure in the UniB administration was opposed to the establishment of Film Studies or Media Studies at the institution, not seeing these as legitimate fields of study for a university.

CHAPTER SEVEN: CASE STUDIES OF ADAPTATION IN THE HUMANITIES: DEVELOPMENT STUDIES PROGRAMMES

> Clearly, the 'magnitude of achieving synthesis has been underestimated. Interdisciplinarity does not spontaneously emerge by putting an economist and a sociologist, or any other combination of specialists, in close proximity. (Klein, 1990: p. 116)

This chapter presents the second of two pairs of case studies focusing on the adaptive orientations of academics situated in the Humanities faculties programmes of the two institutions under study. This second programme context focuses on the regionalising field of Development Studies, thus referencing a somewhat more defined field of practice, and occupational identity, compared with the more diffuse identities projected in the *BA in Humanities* programme discussed in the previous chapter, but somewhat more comparable to the regionalising fields of Film Studies and Media Studies which were referenced in the *Film, Media, and Visual Studies* programme. This regionalising field could, potentially, provide a principled basis for deciding on cross-disciplinary contributions to a programmatic curriculum, and thus a site where adaptive dispositions could be exercised.

It is clear that in both cases discussed below an interest by some academics in Development Studies preceded the programmatization process, although in fragmented and unconsolidated ways. Prior to the programmatization process, Development Studies as a focus of interest had been pursued only by individuals within departments, usually without reference across departmental boundaries. Although the period of data-gathering (the 2000 academic year) marked the first time that such programmes were listed in the respective handbooks of the two institutions, it was not the first time that attempts had been made to forge similar multi- or interdisciplinary curricula in this broad area. The selection of the *Development Studies and Social Transformation* (*DSST*) programme at UniB as a case for this study was based on information which suggested that the programme had been identified by senior management as an exemplar for the rest of the institution to follow during the programme planning process at UniB, because considerable creative activity from

several departments (including the presence of an overseas consultant) had been associated with the programme, and because it had an approximate counterpart at UniA in the shape of their *Development and Environment* (*D&E*) programme.

But, as we shall see from these two case studies, the assumption that the relatively specific field of study and graduate identity, and the apparent wide opportunities for this work in South Africa, might provide the basis for a changing discursive and social order across these boundaries doesn't necessarily hold. Instead, where moves have been made towards closer relations across borders by individuals with adaptive dispositions (particularly in the UniB case below), we see moves by non-adaptive colleagues to protect insulations and autonomies, sometimes giving rise to visible conflict, and thus placing limits on the exercise of adaptive dispositions.

7.1 The Development and Environment Programme at UniA

Compared with the loosely-structured *BA in Humanities* programme discussed in Chapter Six, which allowed students some choice in their combination of majors and electives, the *Development and Environment* programme is a much more tightly-structured curriculum with few or no such options available. The programme consists of three compulsory majors in Geography and Environmental Studies, Sociology, and Public and Development Management. Students are also required to do a year of Economics, either the mainstream version or a less numerate version designed for humanities students. Apart from this, students only have space to choose one additional one-year subject from a very limited list of electives. Although more tightly structured, the programme thus still preserves disciplinary majors as the chief building blocks of the curriculum structure, by and large preserving the traditional discursive order.

Moves had been made in the past to open up the traditional discursive and social order, but accounts given by respondents of prior attempts to promote Development Studies at UniA reflect a history of strong boundary maintenance. Efforts four years previously to establish development studies as an interdisciplinary field of study had been "scuttled ... because of turf battles", where the field was seen by one department

as "their disciplinary domain, and they didn't really want to open up their field of academic activities to other departments" (AH11: p. 1). The 'turf-guarding' impulse seems to have been reinforced at the time by the system where student enrolments are used to calculate staffing levels in departments, prompting a reluctance from academics to 'share' students across departments. The interest in this case study is thus to see whether the programmes exercise provides an opportunity for these previously frustrated adaptive ambitions to find effect. Two of the three leading academics interviewed here both come from regionalizing intellectual fields (Geography and Environmental Studies, and Public and Development Management) and both project discourses characteristic of pedagogic-adaptives. The third individual comes from a singular (Sociology) and retains a traditionally insular disposition. In the account following, we thus see pedagogic-adaptive dispositions being articulated, but with significant constraints on the scope of their adaptive influence.

The *D & E* programme is led by an academic who, in the interview, projects an adaptive disposition motivated primarily by pedagogic (outcomes-based) discourses and then by an avowed inclination to look to the market (although there is no evidence in the interviews that the 'market' was consulted in any systematic way):

> [It required] actually getting consensus on what a programme entailed. I think the central theme, really, was the outcome. There's a little person that you have to produce at the end of the day ... to produce someone who would be able to go out there and do a specific job. We looked for a niche out there where we think we would be able to place people,... and then you said, okay, if this is the field in which there is an opening, then what do you require to be able to be trained for that purpose? (AH1: p. 2)

This adaptive orientation is echoed by a respondent from another department who also projects a pedagogic disposition, and who invokes the language of 'skills' to argue for a movement away from broadly formative degrees:

> That whole NQF paradigm, I think, is important, where you have to accept that in the end it is not getting people a degree or a diploma or a certificate, just to develop his or her potential fully, like it has been framed in the past ... but a more significant part of the objective of the training would then be to transfer concrete and practical skills ... for different outcomes, the fundamental outcomes, the cross-field outcomes

several departments (including the presence of an overseas consultant) had been associated with the programme, and because it had an approximate counterpart at UniA in the shape of their *Development and Environment* (*D&E*) programme.

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> That whole NQF paradigm, I think, is important, where you have to accept that in the end it is not getting people a degree or a diploma or a certificate, just to develop his or her potential fully, like it has been framed in the past ... but a more significant part of the objective of the training would then be to transfer concrete and practical skills ... for different outcomes, the fundamental outcomes, the cross-field outcomes

> and others. ... I think the mind shift is going to be along the lines of now accepting that your task is much more comprehensive as a lecturer than you originally thought. Instead of assuming that people can read and write when they get to you, now SAQA says it is part of your duties, it is your responsibility to ensure that if they couldn't read or write when they get to you, when you deliver them with a degree, you must see to it that they can read and write, and do it in an applied way, not only have knowledge about certain issues, but be able to *do something* with that knowledge in a specific way, with a very logical and clear-cut objective in mind. (AH11: p. 7. Respondent's emphasis)

These adaptive dispositions, however, are not easy to sustain. Academics in this context find themselves caught between the incommensurate demands of the discourses of the reform on the one hand, and the cold-eyed economics of staffing-by-enrolment formulas on the other hand. While the convenor of the programme is able to articulate an 'outcomes-based' discourse, he also acknowledges that he quickly came up against conditions which limited opportunities for entirely custom-designed curricula suggested by this approach. Apart from some courses in the *D & E* programme where new discipline-based modules were designed from scratch, academic staff drew on existing courses as the basis for their participation in a number of programmes. The key issue of limited resourcing, and the survival-oriented requirement for disciplinary courses to serve *several* programmes at once so as to maintain optimal enrolment levels, together set limits on the customization of curricula, even when the adaptive dispositions of the academics concerned might have supported this:

> People might say, okay we should do this or that in terms of a specific module, and we would say, well, you can't really do that because you already are in programme elsewhere, for which your particular module was found to be coherent with the outcome of **that** programme. You can't just unilaterally change that now, because then you are disrupting the fabric of that programme. ... I think the moment you narrow the focus down to specifics, then you get a problem with coherence in specific programme packages. It is a lot easier to keep things rather broad, rather vague, and then it seems coherent. (AH1: pp. 2, 9)

In this way, the economics of curriculum within the institution have worked against some of the discursive ideals of the reform. It is clear in the context of this programme that disciplinary insulations have remained strong, and that no significant modification of the existing respective disciplinary curricula is attempted, nor are

cross-border relations between academics, or between the university and industry, fostered. Even in a context where there is a history of a changing discursive order, based on a changing pedagogic model, it seems that this history works to limit the possibilities of cross-border activity. For example, the convenor notes how a prior shift towards problem-based curricula[35] in his department (Geography & Environmental Studies) has limited his department's capacity to offer modules across boundaries, to where such pedagogic shifts have not been made:

> We are working with a problem-driven approach ... We have a third-year module on water in the environment. The guys [in the Science Faculty] would say 'we want you to produce us a module in Bio-Geography'. Bio-Geography is a sub-discipline that is not problem-driven, it is discipline-specific. It deals with a specific disciplinary field, but it is not a specific problem. We have basically made this disciplinary adjustment [towards problem-driven curricula], and that works in this [Arts] Faculty, but we can't take that same thing and just package it across the border. They want something else from us, and we have either got to produce that specific module separately - and that runs contrary to the White Paper-driven principles, where we were told we have got to decide what it is that you are, you have got to decide on your specialisation, stuff like that. So we really can't serve two masters at this stage. (AH1: p. 8)

Here, paradoxically, a pedagogic reform (problem-based learning), normally intended to weaken discursive boundaries, has served in this instance to strengthen the insulations which define this department and its members, apparently in an effort to preserve the purity of its chosen mode of pedagogy. Insulations are, however, sustained also by more traditional means: another leading academic associated with this programme retains a traditional insular disposition, and his stance against the reform seems to arise from a perception that it is associated with the advent of neo-liberalism generally, and managerialism in higher education more specifically:

[35] In addition to the discourse of an outcomes-based approach to education, some respondents at UniA also suggest that learner-centred pedagogies have gained some currency at this institution prior to the programmes policy: where this was taken up, it involved student-centred, small-group learning where the academic is de-centred into the role of facilitator: 'From the sage on the stage, to the guide on the side', as some respondents put it. This often involves a shift from a discipline-based to a problem-based curriculum structure. This approach is often used as a means of promoting inter-disciplinary approaches to curriculum, but seems to have been used at UniA within departmental boundaries, although in this instance (Geography and Environmental Studies) the department encompasses a region rather than a singular.

> It's striking that the world trend towards this interdisciplinary, supposedly more practical stuff, in Europe, in Britain for example, coincided with the Thatcher era, that it coincided in America with the Reagan years and so on. And we're going through the same process, only more acutely. And there's the question of whether certain universities will survive, let alone certain unsought-for departments. We can't see this programme exercise as completely divorced from that. (AH12. p. 3)

The would-be reformers of the pedagogic disposition acknowledge this resistance: One accounts for the resistance in two pathologized ways, the first being a consequence of 'conservatism', and what, from another view, might be considered as deep disciplinary specialization is re-cast as a 'comfort zone':

> Lecturers now suddenly [have to] repackage the stuff they have worked on for the [whole] of their lives, for their whole professional career, and suddenly you have to repackage it, so it moves you out of your comfort zone and it's an effort. People who may have started to cruise now, who thought that they have now finally arrived – they are senior lecturers or professors and they can now start to relax – suddenly found themselves in the situation where they have to start all over again, start to learn all over again. ... More conservative ... people really resist the implications of re-designing their packages now. ... So there is still that political, cultural element of resistance (AH11: p. 3)

The second source of resistance, he argues, is simply 'ignorance' of the discourses which inform the restructuring initiative:

> But then you have a group who just don't understand what is happening. They are satisfied with what they are doing, it works for them and there is just no reason why they should now suddenly change their approach. ... [They are] people who don't know what the hell is happening. They don't understand the SAQA business. Because of ignorance, because of non-understanding of what it all implies, they resist it, and they just go with the flow. In my experience, once you start talking to them, explaining what is happening, explaining the method in the madness, if they start understanding what is happening and if they then start comparing the defects in the current system, and the fact that our results, in any case, are not what we would like them to be, I tend to find a genuine attempt, in the minds of some of my colleagues, to then try and improve. So once they catch fire, they do become more enthusiastic. (AH11: p. 4)

This missionary zeal, however, remains largely unrewarded in the context of the *D & E* programme. The traditionally-inclined academic remains committed to the intrinsic values of the disciplines, and resists the discourse of pedagogic reform:

> You could spend an awful lot of time fussing around 'coherence', but the more important idea is that each ***segment*** of it is well done, at undergraduate level. ... At the end of the day, I don't think that it really matters too much ***what*** undergrads do, especially in the Arts and Social Sciences, so long as what they are doing is of reasonably good quality. I'm not sure you can compensate for indifferent teaching by talking about 'coherence' or whatever else. (AH12: pp. 1-2. Respondent's emphasis)

The interactions between academics across the borders have thus had limited value in rewarding connective relations, as the conversations were about placing modules unchanged in as many contexts as possible, with little opportunity for developing any sense of a shared intellectual project – the key to reaching agreements on a changing discursive and social order:

> There isn't that sense of "We're a little group, we're doing this thing together" because it's the same modules. ... So it becomes vague the moment you are also involved in a lot of other programmes. (AH1: p. 15)

Most significantly perhaps (especially in the light of the UniB case which follows), the negotiation process around the *D & E* programme has also prompted little conflict, helping to confirm that the discursive and social orders have experienced little destabilization:

> I certainly couldn't think of any antagonistic relationships associated with any of this. Maybe because the structure they chose to follow, and the bloke who led it, was widely accepted. (AH12: p. 3)

It also becomes clear that participation in the programme is driven for some, if not all, by defensive rather than substantively adaptive motives. Two of the three respondents interviewed for this case foregrounded their perceptions of the context in which their departments responded to the programmatization process, suggesting that their responses were strongly influenced by issues of survival in the face of retrenchments and departmental closures.

> The faculty was in trouble, the individual departments were in mortal trouble and actually disappeared in that process. ... And obviously that led to resentment. People were being laid off in the process. There was resentment in terms of the whole funding mechanism, whereby the Arts departments ... were judged to be overstaffed. ... I think that in our faculty [programmatization] was seen as part of an onslaught on the survival of certain subjects, it was endangering people's livelihood, so it was an emotive type of thing. (AH1: p. 3)

> [Programmatization has] been linked with downsizing – if you couldn't find a place [in a programme] we'll finger *you* for being disappeared! (AH12: p.3)

Indeed, later in the interview (after assumptions about the interviewer's identity and purpose have been clarified)[36], the strength of the adaptive identity that was initially projected by the convenor is seen to be weaker than at first appeared, if not actually in retreat:

> People have reached the stage where they simply say, "Thank goodness this is over. Now I can start being what I wish to be again." This is almost like it has been an intermission, or something, but not a pleasant one, because you were forced into doing this, forced into spending all this time on it, and now you just want to get back to business again. (AH1: p. 19)

Despite the incidence of the outcomes-based and 'skills' discourses recruited by the two academics who are inclined towards pedagogic adaptiveness, there is little evidence that these dispositions find sustained effect in any changed principle of discursive order in the programme's courses, or in any teamwork across borders to pursue pedagogic reform. It seems that the connective relations across borders have

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[36] This clarificatory exchange happens late in the interview and proceeds as follows:

> **AH1:** ... I think to some extent it is almost like we were supposed to come up with the whole programme system and structure without any technical guidance. But basically that is what you are busy with at the moment, is to look at the programme approach and to come up with an identification of the holes that are still sitting in that concept and to give us an idea of what we need to do?
>
> **RM:** Well, I am trying to analyze the different kinds of responses to the policy, and I am trying to get a sense of how profoundly academic practices are likely to change as a result of the implementation of the policy, and what I can see across the board is an enormous amount of work at the structural level, but very, very little substantive change at the level of individual academic practices on the ground. What I am listening for are the reasons why practices on the ground are not going to change that easily. (AH1: pp. 18-19)

found effect in only limited and transient ways, usually in terms of negotiating inclusion in new programme structures. There is little evidence of adaptive dispositions finding fulfillment in a continuity of intellectual or pedagogic collaboration. Once structural inclusion has been effected, the disciplinary identities and practices are again the dominant dispositions for all three individuals. It seems clear that strong structural (particularly related to resourcing) and normative (traditionally-oriented) constraints inhibit the exercise of the pedagogic adaptive disposition in this context, and there is no evidence of strong cognitive or market adaptive dispositions at work here, in spite of the regionalising field that the programme references. The logic of disciplinary forms of organization, and traditional dispositions, thus remain the most compelling bases for social and discursive order.

7.2 The Development Studies and Social Transformation Programme at UniB

The theme suggested in the account of the programme at UniA, that of a failure of any connective project to emerge in spite of the adaptive dispositions of some respondents and the availability of an existing field of practice as a potential reference point, becomes more starkly visible in the data arising from the counterpart programme at UniB. As noted earlier, this is almost certainly the consequence of the greater levels of social and discursive destabilization experienced at UniB, relative to UniA, arising from the differing social and discursive units that were being traded in the respective restructuring exercises (departments vs. individuals, and majors vs. courses or individual specialisms).

At the time of data-gathering, the programme in *Development Studies and Social Transformation (DSST)* was a multi-disciplinary structure, composed mainly of contributions from the four departments of Sociology, Social Anthropology, Environmental and Geographical Studies (EGS), and Political Studies. The structure of the programme is complex (reflecting the many compromises embedded within it): students are required to complete four compulsory *DSST* 'core' courses, one from

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Clearly, what this reveals about this respondent's assumptions up to this point colours how his

each contributing discipline, in both first and second year, and these can then be combined with further studies in any *one* of the four participating disciplines. On the face of it, it would seem that a programme in development studies in this context would provide an ideal basis for cross-border collaboration, and thus for the exercise of adaptive identities. Individual academics in all four departments have a history of interest in development, and the field of development studies, although broad, should be a compelling one in South Africa's post-apartheid context. Indeed, during the early phases of the programmatization process at UniB, the *DSST* initiative was held up as an exemplar for other potential programme groupings to emulate. But by the time the interviews are conducted, this early enthusiasm has dissolved, and the programme is a site of considerable conflict.

In this UniB case, we begin to see again the ways in which the adaptive impulses are at odds with traditional insular dispositions. In this context, the adaptive orientations articulated by key respondents are informed by both cognitive and pedagogic motives. The convenor projects both of these dispositions, beginning at the outset with a cognitive adaptive orientation, and then later following this with a pedagogic adaptive orientation. The analysis of this case begins with the ruptures occasioned by the contestations over intellectual territory, before illustrating differing orientations towards pedagogy.

Efforts by the convenor early in the programme's life to find cognitive common ground for the disciplines involved in programme proved ultimately fruitless, and the history of the four 'core' courses reveals the difficulties inherent in weakening disciplinary insulations in pursuit of a common project. The original proposals for this programme, sponsored by academics from two of the four contributing departments, envisioned that the core would be (what the convenor calls) *inter*disciplinary, involving collaborative input from all participating disciplines. However, in the event, less adaptively-oriented colleagues from the other two departments resisted this.

The accounts from various respondents suggest that the social dynamic characterizing the negotiations between these participants focused not on how the different

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responses prior to this should be interpreted.

disciplinary resources would *contribute* to a common approach to development, but instead focused on the epistemological *differences* in the respective approaches. One account sees the boundary tensions arising as a consequence of an ill-defined border between neighbouring disciplines:

> For quite a long time, Sociology has looked like a kind of falling-apart Cinderella department. ... The Sociologists have found themselves with nowhere to go. ... I've taught on those [first year interdisciplinary] foundation courses for three years now and what astonished me was that [a Sociologist] was teaching Anthropology, taking materials out of Anthropology, and it wasn't the first time I heard that. Some years before, a student was doing Honours, and I said "What are you going to do?" and she said "Honours in Sociology", and I asked her "Why?" and she said "They do development stuff". I said "What do you mean, what stuff are they doing?" She proceeded to tell me. She referred to articles that they were using that *I* had written! So what I'm saying is that they have lost any sense of what their discipline is. ... They want to hold onto their own disciplinary identity, but they just absorb stuff which we regard as ours. (BH11b: pp. 4-5)

This respondent refers repeatedly to "the lack of trust" (e.g. BH11b: pp. 2, 3), and as a consequence the attempt to forge a collective vision, the original idea of a jointly-conceived interdisciplinary core, dissolved in the climate of "disciplinary jealousies (BH11b: p. 4). The convenor (a Sociologist) relates how the discursive insulations were sustained:

> Okay, so instead of having a [common] carefully constructed notion of Development Theory, there was a very different notion of the discipline, which says instead – EGS has got a course called 'Cities of the South' but embedded in it, it has a whole lot of Human Geography theory about where cities come from and so on. [Politics] has got a course in 'Development Management' which has its own set of theories. Anthropology has got another one. Sociology has got something called 'Introduction to Development Theory'. And they all said "These theories all enjoy equal status." ... Right, so all of a sudden we had a *multi-*disciplinary [rather than an interdisciplinary] core. (BH15a: pp. 8-9)

The compromise was to include an existing course from each of the four participating disciplines, to make up the 'core' at each year level, but (as in the UniA case) these courses would be serving several programmes simultaneously:

> We had a situation where people were saying we are not going to offer anything new, we are just going to take our existing courses and shove them in ... and we'll pretend that they fit together, but they didn't. There was no way that they were designed together. In fact, we had quite a strong argument from people here who were saying we don't have time to make them fit together. We refuse to have meetings, or even to circulate our course outlines to each other to see what each of us is doing. There was that level of recalcitrance and disillusionment, and I think with the whole process of the programmes anyway. (BH15b: p. 5)

Thus the convenor's cognitively-driven adaptive disposition, which sought to identify a common theoretical base for the programme which could be invoked across the contributions from all four participating disciplines, is resisted by at least two of the negotiating parties, and this cognitive project has to be set aside. His adaptive orientation, however, then pursues a pedagogic avenue, and in this endeavour he also has one ally, in the shape of the colleague from Political Studies.

In contrast to a traditional disciplinary disposition which requires that the structure of a curriculum be determined by the discursive structures of the discipline itself, the pedagogic-adaptive disposition would argue that the recontextualisation of disciplinary knowledge into a curriculum should be strongly guided also by pedagogic considerations. The respondent from Political Studies, arguing (in a context where only mainstream economics is on offer, with high entry requirements, and high failure rates) that economics can be made accessible to any motivated university student, argues that the traditional discursive order should be subject to pedagogic principles that serve to widen access:

> I think what appalled me was the inability of someone in this university to say that we *can* make people who are not numerate, numerate and this is how we can do it. If you want that to happen in your programme, this is the time you have to give to it, this is the staff you will need. ... If you say that they must be able to read graphs and they must be able to do ratios and stuff like this, this is what needs to be in place. (BH18: p.11)

This argument for widening access rests on the assumption (identified by Bernstein (1996) as the 'competence' model) that all learners have an equal capacity for acquisition, and that alternative modes pedagogy can compensate for difference and disadvantage. The convenor of the programme also projects a pedagogic adaptive demeanour, predicated on a social equity project:

> Weaker students will for once in their lives build a firm foundation of concepts and theories, of strategies and habits of argument, so that when they venture into the uncharted and chaotic waters of 'free debate' they will be able to translate what they had from 'safer' times into this new environment. (BH15c: p. 2)

This adaptive stance argues for an approach which would subordinate the deployment of disciplinary knowledge in curriculum to the achievement of a 'hierarchy of specific skills' (BH15d: p.1) related to the capacity of students to read and produce academic texts. The contrasting assumption of the traditionalist disposition (the 'performance' model in Bernstein's terms) tends to incline, as I show below, to the elitist 'sink-or-swim' orientation, and thus discounts 'progressive' pedagogic arguments. These traditionalist academics associated with this programme have resisted attempts by (especially) the programme convenor to circulate competence discourse[37] amongst his colleagues, and in their responses they distance themselves from what they project as pathologized practices:

> Students at [UniA] are spoonfed. That is, they are given course readers instead of being encouraged to search for materials on their own as part of the learning process; they are encouraged to rely on lecturer notes (provided through overheads) and the readings provided by the lecturer rather than independent reading. ... My own conviction, based on my experience, is universities do not teach: they merely throw a challenge to those involved in the learning process. It is up to the students to take up the challenge and swim in the ocean of knowledge. (BH19a: pp. 1-2)

> Are we dumbing down to meet the students' demands for a good grade effortlessly achieved? ... I would leave much more to their initiative even at the risk of the weak ones going under. (BH25: p.1)

The social logic of a traditionalist position is to sustain the social insulations and the traditional text-centred pedagogic order, while, by contrast, the pedagogic adaptive disposition aims to promote a homogenizing learner-centred pedagogy. Usually this adaptive disposition is exercised within a departmental context, either individually or collectively, but in some cases the disposition has seen the programmes exercise as an

[37] The convenor circulated a document which advocated a competence-style pedagogic method for one of the core courses of the DSST programme. This prompted an extensive and heated exchange of e-mails on the issue.

opportunity to advocate a common, usually reformed, mode of pedagogy across the departmental contributions to the programme.

In the extract below, one such respondent describes the process as she has experienced it in her department in the past, and regrets its absence in the *DSST* context. In her view:

> [We need to be] sitting down and saying "we are teaching things together". This is a ***programme*** we are teaching – can we go on a *bosberaad* [retreat] and sit down and say: "What it is we are doing?" Textbooks, integration, what are the issues and how are they being looked at? It has to happen every year actually. It is consensus, in a sense. We used to sit down every year and say – this is what we are doing in the first year, second year and third year and postgraduate. The questions that arose – where are these questions picked up again [in the curriculum] and where are they amplified? What gets dropped? ... To say this is what we are reading, these are the new books. And we would spend two to three days doing it. And we would then require after that, that people bring the essay questions for their courses, their topics and those would then be thrashed through. ... The interesting thing is that I don't have this here [in *DSST*] because I do it all by myself now – I don't have anybody to share this with. So, in that sense, I am not kept on my toes – I am only as good as my best students are. ... I dread to know when I am going to get the first *DSST* people – I may get them in the next semester – and I won't know what they have learned. (BH 18: pp.19-20)

For this respondent, the programmes exercise ironically brings a greater isolation rather than promoting connectivity across boundaries. She loses the collegial conversation about curriculum within her departmental community since the disciplinary major is no longer the unit of curriculum, and she does not find a replacement collegiality within the new programme community because of strong disagreements on pedagogic (and as I show below) and intellectual issues. The attempt by these pedagogic adaptives to forge a common pedagogic project fails to recruit colleagues to the cause, and instead prompts considerable hostility from the traditionalists. Behind the stances articulated by the pedagogic adaptives on the one hand, and by those defending traditional autonomies on the other hand, stand competing visions of the social role of the university, and thus of academic practices. The traditionalist disposition tends to see the university as a stable, elite institution which prioritizes the intrinsically-driven knowledge production and reproduction. By

contrast, the pedagogic adaptive disposition sees the university as needing to be 'responsive' to its changing social context (especially in terms of social equity and economic development), needing to 'massify' in order to distribute the social goods of tertiary education more widely. This is one of the key normative divisions operating in the institution. The introduction of a discourse of pedagogic reform by adaptively-oriented academics is thus seen from a traditionalist stance as an assault on the status of the discourses that constitute the primary resources for professional identity.

A further structural factor which helped to sustain the traditional order was the university requirement that all course codes should be departmental ones, with the result that student enrolments in those courses would be credited to a single department, rather than shared across contributing departments. In a context where programmatization was widely suspected to be a stalking horse for retrenchments, academics were concerned to maintain or strengthen student numbers in their courses. One respondent from a small department compares his involvement in another programme where the grouping of contributing disciplines is based on neither an intellectual convergence nor a projected field of practice; instead:

> It is an arrangement of convenience to make sure that [the discipline] survives. It was a means of having a relationship with two other disciplines which were going to attract [large student numbers]. ... We know if we put ourselves alongside both of those two, they won't be threatened. They don't care if they lose a few students to us [when the students eventually choose their senior courses]. (BH11b: pp. 9, 16)

This respondent notes that this latter 'marriage of convenience', characterised by no coherence or co-ordination across disciplines in any form, is an entirely amicable arrangement. By contrast, the *DSST* programme, which is referenced to an existing field of practice, and which has potential intellectual commonalities across disciplines, is fraught with tension and mistrust. It seems that the reason that the explicit 'marriage of convenience' model works is that neither resources nor trust need be an issue: all participants continue as before, within their established traditional disciplinary positions. The reason *DSST* has difficulties is because the high cost of modifying the discursive and social order immediately thrusts issues of trust, resourcing and identity to the fore, in a context where such transitions have not been provided for.

As the convenor attempts to travel from his traditional departmental order towards an adaptive programme-based order, he becomes caught in an organizational 'no-man's' land between department and programme. On the one hand he is accused of betraying the interests of the discipline - he is committing "academic exterminism" (BH19b)[38], or he is colluding in the production of "Kentucky Fried Knowledge, standardized, nugget-sized pieces expertly designed to meet the demands of the market" (BH20)[39]. On the other hand his connective initiative is rebuffed by colleagues from other disciplines, who often perceive him to be acting in the interests of his own discipline.

> [He] could never work out whether he was head of [department] or programme convenor. And there were often times when he couldn't change caps fast enough. He didn't realize he was wearing two caps and he had to keep on switching those caps. (BH11b: p. 2).

As a consequence, he becomes disembedded from his own departmental solidarities, but he finds no 'new collegial' community as a stable collective social base on which to forge an adaptive programme-based alternative. This experience carries a high personal cost for the individual concerned, and he has since withdrawn from his leadership positions and is considering leaving academia.

7.3 Conclusion

We have here two cases of attempts to modify the traditional academic order by referencing the distinct, if diverse, field of development studies. In neither case are the ambitions of the adaptively-inclined academics fulfilled, and efforts to modify either the social or discursive order meet with little success. The significant difference between the two cases is the notably higher incidence of conflict in the second (UniB)

[38] "Thus with the establishment of these programmes, all courses dealing with social issues in general and social problems in particular have been abolished. Not only that, even those courses which used to deal with social science theories have virtually been scrapped. In reality, *the establishment of programmes has meant the abolition of sociology as a discipline*." (BH19b: p. 16. Respondent's emphasis).

[39] My reading of the situation is that the programme convenor was oriented towards firstly a cognitive-adaptive and then a pedagogic-adaptive position, but was hanged by his colleagues for being a marketeer. Some respondents in this context (Humanities at UniB) conflated competence-oriented and OBE-related pedagogic reform with the 'marketization' of higher education, although in South Africa OBE discourse was sponsored by various social groupings, most visibly those lobbying for issues of social equity.

case, where the institutional regime of reform attempted to destabilize traditional autonomies more radically than at UniA. The various accounts presented by respondents in the UniB case suggest that the programme convenor attempted to modify the traditional order, firstly based on a cognitive project which referenced the field of development studies, and secondly on a pedagogic project motivated by social equity concerns. On both counts he met concerted resistance, as noted above, from colleagues in the programme as well as colleagues in his own department. In neither case was a common project established that could command the allegiance of a diverse group of academics, and their differing orientations. Indeed, in both instances the attempt was seen as potentially threatening to the identity, autonomy or territory of individual academics. The consequence was a significant deterioration in relations between academics, at least temporarily.

It is possible to speculate at this point that the sensitivities exposed in the case of UniB are due in part to the fact that disciplinary boundaries in the social sciences tend to be arbitrary, overlapping and changing – a consequence of their form as 'horizontal knowledge structures', as Bernstein (2000) notes – and are therefore less reliable as resources for stable identities, giving rise to defensive or competitive stances when institutional landscapes are destabilized. Further, the fissiparous and non-hierarchical nature of horizontal knowledge structures also results in their not providing easy common ground on which to build consensus about a new discursive order. I have also noted how the differing stances towards pedagogy (for example, text-centred vs. learner-centred) reflect broader divisions about the social role of universities, with implications for the role and identity of academics. An attempt to introduce learner-centred pedagogic discourses founders because it is seen as threatening to the normative system which underlies traditional elite conceptions of the university.

The two cases outlined above also illustrate some resource-based contradictions. Firstly, during a climate of shrinking resources and a managerial ethic of "do-more-with-less", the policy calls for a model of curriculum and pedagogy which is relatively high-cost compared to the prior traditionalist model, both to instantiate and to maintain. Secondly, the policy requires academics to invest relatively more of their time into one activity (pedagogy) in a system where the primary rewards are related to a different activity altogether, which is research and publication. Under these

circumstances, it is not surprising that adaptive orientations find little encouragement, especially in contexts where traditional patterns of resource distribution have been maintained.

As a consequence, the task of instantiating an adaptive curricular and social order which succeeds in recruiting the allegiance of academics in a connective project is clearly a complex challenge, one that would need to take into consideration both the range of deeply-felt normative instincts of academics, as well as the provision of a secure resource base that would limit perceptions of risk, and allocate resources and rewards to the new adaptive priorities. Seen through an identity-based frame of reference, it is clear that, despite the policy injunctions, and despite the availability of a field of practice as a reference point, adaptively-oriented dispositions in this context encounter considerable obstacles in their efforts to modify academic practices. Although adaptive dispositions are articulated by some respondents, traditional disciplinary identities remain enduring social and normative positions for other academics in these two cases, and the costs (in terms of appropriate adaptive capital, including leadership resources) of attempting to reconcile these opposing stances seem not to have been provided for in these contexts.

CHAPTER EIGHT: CASE STUDIES OF ADAPTATION IN THE NATURAL SCIENCES: BIOTECHNOLOGY PROGRAMMES

> Interdisciplinary work disturbs conventional academic social structures with its egalitarian assumptions and the way it ignores the boundaries and hierarchies of traditional academic roles. It simultaneously challenges epistemological and social structures by essentially questioning the dominance, validity and autonomy of each member's disciplinary models and assumptions. ... The result is that differences are brought out into the open sometimes with dramatic effect. (Limerick & Thomas, 1990: p. 10)

In the previous two chapters, I have presented case studies from Humanities contexts. These next two chapters present case studies from the context of the Natural Sciences. Apart from the continuing interest in the normative and resource-based considerations informing adaptive initiatives, there is also the question of the extent to which a context of vertical knowledge structures[40] would condition the processes of curriculum restructuring and the related social relations. Would the characteristic verticality of the disciplines involved make the cross-boundary negotiations any easier or more difficult to conduct? As we shall see below, the answer is a complex one, suggesting (in the UniA case) that there is a potential for more vertical knowledge structures to provide less ambiguous principles for discursive and social re-ordering, but also suggesting (in the UniB case) that this potential can be undermined by other normative variances and contextual contingencies. The differing experiences recorded in these two cases point, I will argue, to crucial lessons for this kind of adaptive activity.

In the UniA case, local leadership is, over time, able to recruit academics across departmental boundaries to a common and credible vision of a reconfigured intellectual field, which then forms a stable normative base for new discursive order

[40] Becher & Trowler (2001) suggest that while biology may be not as 'hard' as physics, chemistry and mathematics, it is nevertheless considerably 'harder' than the 'soft' disciplines like sociology, history or law. They argue that some biological disciplines are harder than others, notably microbiology and biochemistry, disciplines which are centrally involved in the *Biotechnology* case studies under discussion in this chapter (*ibid*: p. 186). One UniB respondent (a biochemist) suggests that biochemistry is in fact 'harder', and enjoys a higher status, than microbiology as a consequence of its emphasis on the theoretical and the quantitative, and these kinds of perceptions may have contributed to the tensions which characterise the UniB case.

in the form of a common set of recontextualising principles for programme curricula, and reformed social relations between academics. In this context academics are recruited to a new super-ordinate intellectual identity, which is 'additive' in the sense that it does not displace the primary intellectual identities of the academics involved. In the UniB case, however, we see a divergence in the higher-order values, reflected in differing interpretations of the role of the university (elite vs. market), differing approaches to pedagogy (performance vs. competence), and differing models of collegiality (competitive vs. collaborative), and under these circumstances, a principled basis for resolving competing curricular claims remains elusive.

In the two case studies below we see how several departments have come together to contribute components to wholly new or significantly revised courses within three-year biotechnology undergraduate curricula. However the fact that these components are then taught by the respective departments shows that the boundaries have by no means disappeared. In both cases, considerable discussion has occurred across disciplinary boundaries about the content of the curricula, but the data suggests that the respective processes by which these multi-disciplinary curricula came about in each case were significantly different, driven by differing adaptive orientations. In the UniA case, we see the emergence over time of a commonly-understood *cognitive adaptive* (D+, S-) disposition amongst some academics, enabling some consensual modification of the social and discursive order. In the UniB case, however, we see a more complex picture with incipient *market adaptive* (D-, S-) dispositions in tension with *cognitive adaptive* (D+, S-) identities, and with distortions arising from anomalous *traditional* (D+, S+) impulses, prompting disagreements which hinder the adaptive initiative. A further important feature of these case studies is that in both cases, the curricular negotiations are accompanied by some changes in the organizational base of the disciplines concerned, and *how* this organizational change was achieved is a significant factor in shaping the discussions about curriculum. In the one case (UniA), an internally-driven initiative (with support from above) to form an umbrella School of Biological Sciences enabled academic staff to form connective solidarities across disciplinary boundaries, and laid the ground for constructive negotiations about curriculum. In the other case (UniB), the organizational shift (a merger of two departments) was initiated from the top, received only partial support from within the departments concerned, and was (in the short term, at least) unable to

provide the basis for academic staff to transcend claims based on inward-looking traditional disciplinary positions. However, the dynamic that unfolded – and continues to unfold - in each case is, I believe, instructive for this study.

8.1 The structure of the Biotechnology curricula

Briefly summarised, the data show two substantially different *social* processes involved in giving effect to the programmes policy, with considerable consequences for the resultant discursive order. I shall briefly sketch the two curricula concerned, before exploring in more detail the social processes which gave rise to them, illustrating the key issues of identity and authority which underlie these adaptive processes.

The *Biotechnology* programme at UniA is a tightly structured curriculum with a strong compulsory core and a limited range of specified electives. Interdisciplinary modules in biotechnology are prescribed at second- and third-year level, and these combine contributions from (in descending order) botany, biochemistry, genetics, microbiology, and law. For the compulsory co-requisites, biochemistry is the discipline with the strongest presence, followed by genetics, and (distantly) microbiology. At third-year level, students may opt for one of three streams, either microbial, plant or animal biotechnology. There is a module on entrepreneurship, ethics and law, but this is entirely separate from the science-based modules. My informants at UniA generally expressed satisfaction with the structure of the curriculum.

The *Biotechnology* curriculum at UniB, however, is a relatively unstable construct, and is the subject of considerable contestation. *Biotechnology* was first listed in the UniB faculty handbook for 2000 as a 'specially constructed curriculum' but in fact ran as a 'specialization field' (or the equivalent of a 'major') in 2000, the result of last-minute protests and re-negotiations between departments in late 1999 after the handbook had been printed. The central issues under contest (primarily between the departments of Microbiology and Biochemistry) were the 'ownership' of the biotechnology curriculum, the content of 'biotechnology' courses and the required co-

requisites. At the time of data-gathering some of these issues still remained unresolved.

It seems, then, that at UniA cross-boundary agreement had been achieved around a new, stable curriculum, while at UniB such cross-boundary consensus has been harder to find, reflected in an unstable contested curriculum. My interest is thus particularly in the conditions under which the new collective social bases needed to support connective identities are (or are not) formed, and the frames of reference which may sustain or threaten these.

8.2 Biotechnology at UniA

In this case study, academics with cognitive-adaptive dispositions have sought to modify the social order (the relationship between various biological departments) as a consequence of changes in the intellectual field. I shall suggest in this chapter that it is this maturing new social order, established over time, that enables the reformed discursive order of the curriculum. The central feature, here, is the emergence of a credible discourse of adaptation which commands the respect of academics across disciplinary boundaries, and simultaneously the relative lack of resourcing threats operating in this context, enabling the growth *over time* of connective relations across departmental borders. Significantly, the policy of programmatization arrives at a time when there has been an effort for some five years already (initiated from within the departments) to restructure the biological sciences, bringing together seven departments from across two faculties under the umbrella of a School of Biological Sciences. The original purpose of the School is strategic rather than administrative, aiming to strengthen the collective bargaining power of the disciplines within the university. The ascendant status of this grouping is reflected in a decision by UniA to prioritise this as an area of growth and niche strength for the university. Prominent academics in this field have been recruited to the institution for this purpose, and my informants make the claim with some confidence that they are arguably now amongst the strongest of such groupings in the country. The university has invested in a new building which brings together under one roof the once-dispersed departments of Microbiology, Biochemistry and Genetics.

Although the original impulse to bring these departments together was a pragmatic one, the newly-forged unity and strength of these departments has been brought about through an appeal based on changes in the epistemological base of the field. I am struck by how consistently my UniA informants legitimate the new organizational umbrella, and their growing collective identity, by referencing the larger shifts in the field of the biological sciences. Examples of this cognitive motivation[41] include:

> Biology has really gone through a revolution in the last 30 to 40 years in how it is viewed, and the old concept of Botany and Zoology being [the central disciplines] is now completely different, in that there is a greater unity in life and, really, you cannot just divide it because a plant grows in a field and an animal walks on four legs and so forth. It is much more unified, and more diverse at the same time. We needed to get away from that old discipline-based approach. (AS4: p. 13)

> Classical Biology is a descriptive, inductive type of science, an observational science, [but now] it is slowly being changed into what Physics is - a theory-based, mathematically-based science.... The old divisions [between disciplines] don't hold anymore. Previously, you studied this group of species, you had animals and plants and bacteria and viruses and whatever *[indicates divisions along a horizontal axis]*. Biology these days works at this level *[indicates divisions up a vertical axis]* - you either study at the level of molecules, at the level of cells, organisms, ecological systems. And that's a much better division. It's a functional division, as well. So it doesn't depend on which species you have studied, it depends on how you look at them. (AS5: pp. 4, 16)

The shifts in the field of biology are thus from a science of observation and description towards an increasingly experimental and theoretical science, with a greatly increased salience for the molecular and cellular branches of work. This necessitates a more holistic view across the field, which my informants articulate as a shift in their professional identities, where prior disciplinary identities are eventually subordinated to a new over-arching identity:

> You can only solve a biological problem if you can understand the whole picture. ... I think the modern approach is not associated anymore with a system like Botany or Zoology or Microbiology. I think the

[41] Although several respondents recruit OBE and learner-centred discourses in the interviews, it is clear that the primary motivations underlying the adaptive dispositions in this context are cognitive, not pedagogic. Respondents concede that no modifications have been made to modes of delivery.

> modern trend is we should all call ourselves 'biologists' again, and we should say "I'm using a plant but it's part of a system and how does it slot into that whole system? If I change that thing genetically what impact will that have, not on that alone, but on the whole system?" ... Yes of course, we all have our own interest, so you specialise and the further you go with your career path the more specialised you are, but you're still a biologist. (AS1: p.4)

The epistemological shifts in the field noted by my informants must, in their view, have consequences for the social order, or how the field is reflected locally in institutional structures. The drawing of departments together into the School was a first step, although at least one senior informant would have liked to have seen the prior departmental identities dissolved altogether:

> My vision originally, and I was quite alone in this apparently, but I would have liked the school, in the beginning, to be structureless, in the sense that you put everything in one pot and then you stirred the whole pot and then you see what crystallises out, what fits again, with the new Biology. ... The structure must actually reflect what is happening academically. (AS5: p.16)

But, in spite of the changes in the intellectual field, the process of forming the School was not an easy one, and took place against a landscape with all the usual territorialities, especially in a system where student enrolment numbers determine departmental staffing levels. A crucial step in moving towards the new organizational base was to modify the social order in order to establish a culture of trust within an organizational context inadvertently geared to competitiveness:

> Until about five years back, we were totally fragmented as departments. We didn't speak to each other. Zoology and Botany thought we were trying to steal their students and we thought that they were old-fashioned, and there was, in a sense, an imbalance, because all the Botany and Zoology students were in the first year and all the third year students are in Bio-Chemistry, Physiology and Microbiology, so there was a complete shift of students over to the Molecular Sciences. ... They thought that we were trying to steal their position, which I don't think was ever in our minds. I think it was just somebody's stupid perceptions, which in the end had no basis, but they can really cause problems. And so there was a huge distrust a few years back, between departments. (AS5: pp.1-2)

The process of overcoming the distrust was long (five years) and difficult, and involved a great deal of careful work by senior figures in the biological sciences to over come 'hostilities' and 'suspicions of empire-building'. It was on this platform of painstakingly-built trust, and the loose organisational frame of the newly-formed School of Biological Studies (the reformed social order), that the process of programmatization was launched. Clearly, by this time, some of the territoriality of the participating academics had been mitigated in the interests of cross-border solidarities, opening the way for less defensive negotiations about possible new curricula. The programmes-development process was led in the first instance by the Chair of the new School. He describes how the process was inaugurated by invoking the overarching epistemological principle that unified the biological disciplines, before the discursive order was debated:

> We had the Chairmen of the departments come together and [asked]: "Where is Biology today? How can we reflect Biology without looking strictly on a discipline basis?" We identified four areas for programmes, and we then went to organise this meeting of the [sixty-plus academics in the] School and said "These are our four areas, these are the purposes. We need to establish what our goals are in each of these programmes." And then we asked for nominations for co-ordinators. Then we said to each department, "Which programme would you like to be involved in?". (AS4: p.2).

All academics interviewed agreed that this process was characterised by inclusivity and transparency, resulting in a sense of joint ownership of the new curricula by the various participants[42]. This sense of joint ownership amongst UniA academics, however, did not mean that the negotiations were always smooth. The convenor of the *Biotechnology* committee also recalls the process as a tough, but ultimately generative one, that required academics to trust in solidarities that extended beyond disciplinary boundaries:

> We had heavy arguments but they were all in good spirit. Some days I walked out of it pretty upset, having just [presented] something, but

[42] It is important to note at this point that this sense of joint ownership is in contrast with the accounts given by their counterparts at UniB (see below). For example, where my UniA informants are united in their definition of biotechnology as applied *biology*, or industrial *biology*, my UniB informants spend considerable time (and heat) making the case for whether biotechnology was applied *biochemistry* or applied *microbiology*, reflecting the home disciplinary bases from which 'ownership' of biotechnology was being contested.

The process of overcoming the distrust was long (five years) and difficult, and involved a great deal of careful work by senior figures in the biological sciences to over come 'hostilities' and 'suspicions of empire-building'. It was on this platform of painstakingly-built trust, and the loose organisational frame of the newly-formed School of Biological Studies (the reformed social order), that the process of programmatization was launched. Clearly, by this time, some of the territoriality of the participating academics had been mitigated in the interests of cross-border solidarities, opening the way for less defensive negotiations about possible new curricula. The programmes-development process was led in the first instance by the Chair of the new School. He describes how the process was inaugurated by invoking the overarching epistemological principle that unified the biological disciplines, before the discursive order was debated:

> We had the Chairmen of the departments come together and [asked]: "Where is Biology today? How can we reflect Biology without looking strictly on a discipline basis?" We identified four areas for programmes, and we then went to organise this meeting of the [sixty-plus academics in the] School and said "These are our four areas, these are the purposes. We need to establish what our goals are in each of these programmes." And then we asked for nominations for co-ordinators. Then we said to each department, "Which programme would you like to be involved in?". (AS4: p.2).

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> modern trend is we should all call ourselves 'biologists' again, and we should say "I'm using a plant but it's part of a system and how does it slot into that whole system? If I change that thing genetically what impact will that have, not on that alone, but on the whole system?" ... Yes of course, we all have our own interest, so you specialise and the further you go with your career path the more specialised you are, but you're still a biologist. (AS1: p.4)

The epistemological shifts in the field noted by my informants must, in their view, have consequences for the social order, or how the field is reflected locally in institutional structures. The drawing of departments together into the School was a first step, although at least one senior informant would have liked to have seen the prior departmental identities dissolved altogether:

> My vision originally, and I was quite alone in this apparently, but I would have liked the school, in the beginning, to be structureless, in the sense that you put everything in one pot and then you stirred the whole pot and then you see what crystallises out, what fits again, with the new Biology. ... The structure must actually reflect what is happening academically. (AS5: p.16)

But, in spite of the changes in the intellectual field, the process of forming the School was not an easy one, and took place against a landscape with all the usual territorialities, especially in a system where student enrolment numbers determine departmental staffing levels. A crucial step in moving towards the new organizational base was to modify the social order in order to establish a culture of trust within an organizational context inadvertently geared to competitiveness:

> Until about five years back, we were totally fragmented as departments. We didn't speak to each other. Zoology and Botany thought we were trying to steal their students and we thought that they were old-fashioned, and there was, in a sense, an imbalance, because all the Botany and Zoology students were in the first year and all the third year students are in Bio-Chemistry, Physiology and Microbiology, so there was a complete shift of students over to the Molecular Sciences. ... They thought that we were trying to steal their position, which I don't think was ever in our minds. I think it was just somebody's stupid perceptions, which in the end had no basis, but they can really cause problems. And so there was a huge distrust a few years back, between departments. (AS5: pp.1-2)

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> having been told by my colleagues "Look that's rubbish; go revisit that". I think these things were done in a fantastic spirit. ... We were eight people on the *Biotech* committee and we ***wrestled***. We had two-weekly meetings for a long period. And we sent people back saying, "No, no, no, go rework this; it doesn't slot in here; Where is this? Where is that?" ... And some of these things were pretty tough: you were telling people, "Look, I don't care whether you've presented that for fifteen years, it really doesn't belong there, it should rather be in Biochemistry". And they handled that well. Eventually! I mean in the beginning it was like you were taking somebody's lifeline away: he'd been teaching that for fifteen years, and now you tell him, "Look, it doesn't belong with you". I think everybody is now very happy with what we have done. (AS1: pp.13-14)

One of the main tasks involved eliminating duplications in the various programmes that were the result of the prior strong insulations between departments, where common topics had historically been taught in several departments simultaneously. My informants are unanimous that eliminating this duplication (what one calls 'dovetailing') was one of the strongest achievements of the process so far. It is clear that this required an unprecedented degree of trust and generosity, and, crucially, an appeal to a legitimating principle larger than the interests of individual departments:

> I think that it is the nature of the subject, in this specific case, that makes it easy. Dovetailing [of courses] has to do with [seeing] the whole thing, looking at life at the level of molecules first, and then cells, and not beyond that. That makes it easy to say, "Okay, this is the whole, this is what we regard as being important. This department will handle that part, this department will handle this part, etc". So it is not a question of saying, "I'm going to teach microbiology". We, as three departments, will teach this core ... and we are going to be responsible for that part and we are going to leave this part to another department. That is quite something. We gave off the whole of molecular biology, which is traditionally a part of biochemistry. So we said "Okay, we'll let someone else give that". That was quite something to decide. So it is that type of give and take. (AS5: p.12)

The data thus suggests that the participants were able to reference a common epistemology, proceeding from the relatively vertical knowledge structure of the field of molecular biology, to establish legitimate recontextualizing principles. An indicator of the extent to which traditional departmental insulations were weakened in this process is the fact that even some courses that remained as single-discipline courses,

taught from within only one department, were subject to scrutiny and revision from multi-disciplinary teams.

Significantly though, the deputy Dean comments that by the time the programme process was underway, some key material fears of what were once considered 'endangered' departments had largely faded away amid strongly stated assurances that no jobs were at risk.

> [In the past] it was a question of also keeping personnel, and making sure that you had enough students so that you could also justify that number of staff. That I think has changed a little bit - people are not so worried about that anymore. They see that that is not the point. They are not going to take staff away from us - we are understaffed, chronically still. Our department, for instance, is about 80% manned. I can't think of any other Biology department that is overstaffed. Nobody is trying to take away anything from anybody. (AS5: p.16)

It is clear that the negotiation processes in UniA's Biological Sciences were perceived by my informants as reasonably procedural, transparent and inclusive. It seems that the process of modifying the social order, shifting from insulated solidarities to expanded solidarities, and thence to a collaborative curriculum development processes, involved establishing a commonly-held overarching regulative discourse (which references a regionalising field of practice, based on relatively hierarchical knowledge structures) which is authoritative enough to draw traditional departmental identities into a new and extended solidarity for the purposes of the new School of Biological Sciences, and then for a modified discursive order in the form of innovative curricula.

To sum up this case which illustrates the cognitive adaptive disposition: the changing order of the broader intellectual field has thus been invoked by local leadership to legitimate a sustained effort over time to reconceptualise the social relations between academics and departments in the broad field of the biological sciences at UniA. The change in social relations involves a shift from traditionally ordered identities based on a prior epistemological and organizational order to an adaptive disposition based on the acknowledgement of a changing epistemological order which is in turn reflected in modified organizational arrangements within the institution. Significantly,

this cognitive adaptive disposition emerges as a common feature in the interviews associated with this programme, reflecting the extent to which consensus has been established over time in this site. The social base of the previously-negotiated School of Biological Sciences provided a platform of sufficient shared identity and trust for the collegial adjudication of an adaptive curriculum. In other words, this modified social order then provides the organizational base for negotiating a reformed discursive order in the curriculum. Importantly, the local material conditions for these disciplines at UniA (staffing and enrolments, institutional priorities, the procedural integrity of the implementation process) also ensured that these embryonic solidarities were not undermined by contextual insecurities.

However, the spirit of cross-boundary collaboration, and the extended identities that enable this, is still an unstable one in the face of the continuation of disciplinary departments as the *primary* unit of academic organisation. In follow-up interviews conducted a year later (March 2001), informants noted that cross-border discussions were now rare, and that departmentally-based dynamics were again dominant. Although multi-disciplinary programme structures had been achieved, the *on-going* planning, monitoring and adjusting of curricula was not happening. Programme committees lacked sufficient power and needed to be staffed by more senior and authoritative academics. It seems the new adaptive arrangements (around programmes) potentially may be threatened by the gravity of the well-established traditional systems (of departments) through which resources and rewards (including perhaps the resources for traditional academic identities) continue to be channelled.

8.3 Biotechnology at UniB

By contrast, the exercise of adaptive dispositions associated with development of the *Biotechnology* curriculum at UniB has been a considerably more contested process, reflected in the relative lack of the cross-border collegial solidarities based on trust that have emerged in the UniA context just outlined, and an inability to agree on principles for curriculum structure. Tracing the history of the programme negotiations from 1997 to 2000 through interviews, correspondence and faculty documentation, it becomes clear that the negotiations over the curriculum occurred against a backdrop of a history of tension between the departments of Microbiology and Biochemistry at

this institution, and reflected in differing organizational cultures within the two departments. Comments in interviews suggest that within their department the microbiologists emphasized a collaborative mode of collegiality (to the extent of pooling research funds for the benefit of all in the department) and a student-centred climate, while the biochemists emphasized a competitive mode of collegiality and a sink-or-swim approach to students. Negotiations over the new *Biotechnology* curriculum thus did not have the advantages of modified social relations between the departments as the counterpart negotiations at UniA did, and it is clear that something of a turf war seems to have erupted between the two over ownership of - and participation in - the *Biotechnology* curriculum. These disagreements have ostensibly been over issues of curriculum content, but which draw on social issues of territoriality and differing visions of the identity and role of the university. These latter disputes often find expression in debates which pit a (traditionalist) argument for in-depth coverage of scientific content on the one hand against a (market-oriented) argument for 'real world skills' on the other. The territorialities are reflected in debates over which disciplines should be included in the curriculum, and how (e.g as compulsory or optional co-requisites?). Territorial conflicts may have been harder to resolve because of an insistence at this institution that all course codes be departmental codes (i.e. MIC for Microbiology or BCH for Biochemistry), rather than the interdisciplinary codes (e.g. BTC for *Biotechnology*) originally proposed for this curriculum, but rejected by the administration. The relative student enrolment levels have potential consequences for the staffing levels allocated to departments.

Further contextual complexities include the fact that while the two key departments (Microbiology and Biochemistry) were negotiating over the curriculum, they were also faced with the possibility of a merger into a single unit. This was initiated from above (the university's senior management and the Dean) rather than from within the two departments. Biochemistry academics apparently were willing to merge, whilst Microbiology academics were resistant to the idea. Negotiations around this intensified in 1999 and 2000, with the intention that the two departments formally be merged from the beginning of 2001. Given the history of the two departments, and the provenance of the proposal, the negotiations between academics in the respective departments towards this proposed new social order were not motivated primarily by a view of the epistemic shifts in the intellectual field, but rather with a view to the

local cultural divergences which distinguished the two groupings, and this did not bode well for negotiations around an adaptive curriculum.

The *Biotechnology* curriculum was contested at two levels, social and discursive. At a social level, the contest is a territorial dispute over the degree of participation by Biochemistry in a curriculum supposedly 'owned' by Microbiology (The *Biotechnology* programme was administratively located in the Department of Microbiology). At a discursive level, the dispute revolves around regulative principles governing the content of specific courses in the curriculum. With regard to the first social issue, Biochemistry argued that the biochemistry content of the *Biotechnology* courses should be strengthened, and that biochemistry should form a greater proportion of the compulsory co-requisites for students taking *Biotechnology*. With regard to the second issue, the debate is over the relative prioritisation of 'science' content against 'skills' content. Together these two sets of disputes threaten to scuttle the adaptive possibilities that we saw emerging in the UniA counterpart.

Although staff in UniB would be just as well aware of the changing cognitive rules (i.e. the epistemological shifts and the regionalising of the field of molecular biology) as their counterparts at UniA, none of them invoke these in their interviews as a legitimating base for curriculum construction. Instead they present claims and counter-claims based on traditional academic identities. Whilst the microbiologists (the administrative 'owners' of the *Biotechnology* curriculum) enthusiastically recruited colleagues from the Business School, from Law, and from Chemical Engineering, they were considerably more reluctant to work inclusively with colleagues from Biochemistry whose disciplinary territory borders on their own. As I shall show below, the microbiologists attempt to maintain a strong social boundary against the biochemists and resist their proposals for a modified discursive order (in effect a *traditionalist* D+, S+ orientation) whilst simultaneously forming alliances with other disciplines, and with industry, to construct an adaptive curriculum (effectively a *market-adaptive* D-, S- orientation). The microbiologists thus find themselves in a situation characterized by internal contradictions.

Part of the competitiveness between these two departments is contrasting perceptions about which discipline has legitimate 'ownership' of the field of biotechnology. A microbiologist comments:

> [The biochemists] keep on imposing their [view]:"Biochemistry is the only thing that exists and what we [the microbiologists] are doing [in the *Biotechnology* curriculum] is applied biochemistry". That is the kind of attitude. (BS10: p.10)

A senior microbiologist notes the response of the biochemists to a Microbiology proposal that all biotechnology students should begin with a first semester in microbiology:

> The biochemists said, "No, that is not right because then it looks as if biotechnology is applied microbiology!" Which in fact it is to a large degree. You use bacteria as your building blocks for virtually everything in biotechnology. (BS12: p.6)

A biochemist is equally persuaded of the centrality of *his* discipline to the field of biotechnology:

> Biotech is not applied microbiology ... In fact every biotech degree I have looked at is heavily dependent on biochemistry courses. (BS14: E-mail 9-11-99)

As noted earlier, this traditionalist dispute over whether biotechnology is *applied biochemistry* or *applied microbiology* stands in contrast with the collective view at UniA that biotechnology is *applied biology*. This conceptualization of the field of biotechnology in restrictive rather than inclusive disciplinary terms reflects a continuity of *traditionalist* dispositions in the face of what are seen as external pressures for change, and suggests the relative absence of an overarching connective identity based on an acknowledgement of epistemological common-ground. In the absence of this connective identity, the relative arbitrariness of the local organizational boundaries drawn across this common intellectual territory becomes a source of conflict.

Having 'departments' as the dominant frame of reference for the existing social order finds effect in the competitive negotiation strategies adopted. In the comments below, a microbiologist invokes an administrative authority (courses have to be located in departments) to justify 'ownership' of the *Biotechnology* curriculum, and to resist proposals from Biochemistry on the order of the curriculum (thus a D+, S+ disposition):

> [Biochemistry was attempting] severe intellectual property grabs there and for some reason or other, they were ignoring the process and at the last minute tried to come up with an entirely new curricula – and that happened twice. What we did was to ignore all their suggestions, dump it and go with what we wanted. And it ended up that, in this faculty anyway, curriculum streams actually belong to a department, so *Biotechnology* unequivocally belongs to Microbiology. And there are still renegotiations at a late date now, that we are trying to take little notice of because the vision was developed – everybody had input all the way along, to a point. We did most of the driving because we were the ones who initiated the whole thing and then to have people who have not been particularly involved suddenly suggesting an entirely new curricula - to give their department more of a function – didn't hang too well. (BS13: p.4-5).

By contrast, some biochemists aspired to a negotiation process characteristic of a cognitive adaptive disposition, seeking to weaken the social boundary between themselves and the microbiologists[43], but in the face of the rebuffs noted above, they also resort to invoking an administrative authority (the intervention of the Dean):

> We kept sitting them down – I've got the correspondence if you want it – trying to get some input and saying, "Listen, this is an important course, we think it should have the following structure", and we never got any positive response. We very much got the feeling that this is <u>*their*</u> course and they don't want any interference from us. ... It was only really when we wrote to the Dean to say, "Listen, this is just absurd", that we actually got down to get something together. ... We had some very frantic meetings at the end of last year on the structure of it and the way it was going to be done. (BS11: p.9)

These appeals to *administrative authority* and other defensive strategies stand in contrast to the process followed at UniA, which seemed to be governed by the

[43] One biochemist's view is that "the biochemists were going down an inclusivist approach, not a disciplinary territorialist approach like the microbiologists" (BS14: pers com).

collegial authority of peer adjudication, and an intellectually-derived logic for a reformed social and discursive order. In the absence of a commonly-developed understanding at local-level of a principled basis for adjudicating between rival claims, the normal collegial processes of the traditional social order cannot resolve the dispute, and non-collegial strategies are recruited. A microbiologist at UniB comments on his involvement in the negotiations in a climate of residual hostilities, and his efforts to maintain the traditionalist (S+, D+) insulations of their common border:

> Firstly I have learnt how to run the meetings. [I arrive] at the meeting with a lot of the issues settled with various people outside of the meeting and basically pre-empting other people's agendas, which we managed to do on about two occasions, knowing that they would arrive with an agenda. We pre-empted them by going around and organising a number of things, put things in place, and when they walked in, we had a new document on the table which they hadn't seen, which kept them on the wrong foot most of the time. ... It was hugely complicated, very emotional at times. (BS10. p10)

Thus, in circumstances where an adaptive project has not succeeded is establishing a commonly-understood and credible normative logic for itself, the pressures for change run the risk of making visible, and deepening, divisions which hitherto had been tolerated, with the effect that academics who could be ideally suited to adaptive curriculum projects based on regionalising knowledge fields (i.e *cognitive-adaptives*) become defensively positioned in traditionalist dispositions. A new social order, on which to sustain a modified discursive order, remains elusive.

The rifts in this context are not defined only by territorialist rivalries, however, but also include incommensurate regulative principles for the new discursive order. In contradiction to the traditionalist stance maintained with the biochemists, we see the microbiologists embark on a *market-adaptive* (D-,S-) approach to develop the new curriculum by referencing the 'market' for a regulative discourse of 'skills', and by recruiting colleagues from law, business and chemical engineering to teach those skills in the new *Biotechnology* curriculum. This, however, only serves to deepen the dispute with Biochemistry. One of the consequences of this failure to achieve extended solidarities across disciplinary boundaries has been an inability to reconcile opposing principles for the construction of the *Biotechnology* curriculum. In the

account below, we see a market-oriented[44] discourse of "skills" (asserted by one of the leading microbiologists) coming up against a traditionalist argument from the biochemists for the primacy of in-depth disciplinary knowledge. In justifying the emphasis on skills, a microbiologist involved in the design of the curriculum draws on a discourse of industry-related performativity. He critiques what he sees to be the pedagogy of the past from this perspective:

> [In the past]I have taken students to industrial concerns to show them what happens in the real world. The first thing the students always ask these people – "Are there jobs for us when we graduate as third-years?" And invariably there aren't. They would rather have technikon[45] students – they say it straight out – because they are practically able, and students from [UniB] aren't. I see that as a glaring problem. We give them very good academic and theoretical training – but when they get there they don't know how to carry out basic lab techniques that would be expected of qualified microbiologists. They haven't a clue. (BS10: p.17)

By contrast he emphasises the exchange value and performativity of the new curriculum:

> At the end of it, a person has a set of skills and knowledge to market themselves as something to enter a niche in the marketplace – there is no point in having a little bit of this and a little bit of that and then going out there as a jack of all trades – or going out purely as a microbiologist without any business sense whatever. What we have done is – with *Biotechnology* especially – is emphasized the skills for real-world problems – computer skills, communication skills and relevance to real-world issues. (BS10: p.17)

He describes the discursive priorities of the first of the four *Biotechnology* courses, "Introduction to Biotechnology", as follows:

> Our first semester thing was very exciting – a whole term on teaching them skills, which would be drawing up business plans, how to budget, how to set up a new business, basically how to speak publicly, how to present things from a written report and so on. So they had weekly speeches which culminated in a major speech where they had to present

[44] This academic leads the colleagues in his department in signallling an incipient market disposition. His outward connectivity seems motivated mostly by the 'skills' discourse, rather than cognitive or personal entrepreneurial motives. I thus take the opportunity to include some detail in this section about the claims and counter-claims provoked by this disposition in relation to the discursive order.

[45] Technikons are the South African counterpart of what used to be called polytechnics in the United Kingdom.

> a business plan with their own idea and try and convince the so-called investors why their idea was good and write a report as well, using Powerpoint and spreadsheets etc. (BS10: p.2).

This focus on skills, he acknowledges, meant a 'watering down' of science content, and the prioritization of an entrepreneurial student identity:

> The bigger challenge was that we were starting off with students who have very little biotechnology background or even science background. We had to keep it more a conceptual thing rather than in-depth science. So it was more on the level of, say, scientific American or New Scientist, popular magazine, layperson-type level rather than the actual [indistinct]. So they came up with all kinds of ideas like socks that stop athlete's foot and that type of thing – things that allow you to lose weight – a whole range of stuff – something that could be marketed. (BS10: p.2)

The contradiction of the focus on industry-related performativity, displacing traditional 'science' content, becomes apparent, however. Some Microbiology staff, who had initially supported the market-oriented changes, acknowledge that it was problematic to focus on 'skills' before 'science', and students also found it difficult to accept the new outward-looking principle regulating the curriculum:

> Then of course in the *Biotechnology* programme, we relied very heavily on outside people. In fact this is a bit of an experiment which may in fact not have worked. In second year biotechnology, we started out with marketing and business aspects and the students were a bit "Hey? I thought we were being taught science and are now suddenly we are being taught by this guy in business management and legal practice" and all that sort of thing. Two students have actually pulled out. So we may have to rethink that and teach it later. (BS12: pp.5-6)

The biochemists, predictably, were deeply unhappy about the emphasis on business skills, and a senior biochemist sums up the disquiet expressed by other members of the department (and reflects the strong discipline-oriented focus of the cognitive adaptive stance):

> Our overall thinking would be that they have taken a rather soft approach to it, and that the scientific content should be upped a bit. So one of the big debates ... [is] whether they shouldn't be doing hard-core

> biotechnology? A big debate is whether they should be doing a full biochemistry second-year course, because you need those fundamentals to really apply biotechnology, and if you don't have a thorough understanding of metabolism, ... how do you manipulate metabolism to the end of biotechnology applications? And it's an ongoing debate we are having with them. (BS11: pp.4-5)

The academic with the most marked market-adaptive disposition (a microbiologist) is able to circulate his vision of the outwardly-oriented curriculum within his home department, but encounters trenchant opposition from his cognitive-adaptive colleagues in Biochemistry, who see him departing from the internal cognitive logic that should structure curriculum whilst failing to provide an appropriate social mechanism to validate the alternative discursive order.

Finally, in April 2001, the Dean invited the parties to present their arguments at a Faculty Board meeting. So as not to present a divided front in the newly-merged department, a biochemist and a microbiologist engaged in a series of meetings with a range of colleagues and eventually arrived at a common position to present to the Faculty. My subsequent discussions with informants suggest, however, that there are differing perceptions about what was won and lost in this curriculum negotiation (both sides claim they were vindicated), that resentments about the merger linger, and that prior disciplinary histories remain enduring bases for academic identities and allegiances in this context.

8.4 Conclusion

It is important to note that the data presented above represent a brief 'snapshot' in time of two contexts at different points in their respective trajectories of development. In the context of UniA, the process of building adaptive cross-border solidarities around a newly regionalising field of knowledge was begun (albeit tentatively) some five years *before* the curriculum negotiations commenced, and the new allegiances were given organisational form in the new School of Biological Sciences. At UniB, the discussions around curriculum commenced without such groundwork in place, and

work on the social solidarities have *followed* these discussions[46]. The respective landscapes will doubtless change with time, but the point is that the nature of the relations between the groupings (and the normative frames of reference informing these) when the negotiations commenced have influenced how the adaptations have proceeded.

Although both groupings were similarly situated in relation to a regionalizing (and lucratively technologizing) field of study and practice, their respective adaptive orientations were conditioned by varying normative currencies circulating within the groupings. In the UniA case, a cognitive logic is recruited and a committed leadership capacity works over an extended period of time (five years) to build a new social order based on extended solidarities and assurances of material security. We see academics from biological disciplines looking beyond their immediate disciplines towards an overarching disciplinary identity of "biologist", an identity predicated on a view of the epistemological changes in the field of biological science. Senior academics are (for a while at least) able to appeal to the overarching identity in a way that enables academics in these departments to subordinate disciplinary interests to a larger project, and a new curriculum is negotiated on a principled basis by means of peer adjudication. This new social order thus provides a platform which enables the principled renegotiation of the discursive order. Disciplinary identities are by no means lost, and a year later some respondents note that the investment in the extended solidarities has been eroded by the continuing dominance of the academic department as the *de facto* unit of organisation. The erstwhile new unity has so far failed to find a stable social form. But a continuing strength in the biological sciences context at UniA is a sense of alignment between institutional identities and disciplinary ones. The biologists are keenly aware of their ascendant position within the institution, and are heavily invested in the institutional strategy to strengthen their position in the field. The biologists now identify their institutional location as a key element of the strength of their identities when viewed against their peers nationally.

[46] In late 2001, as a consequence of having circulated a draft of a conference paper outlining an early analysis of this case study, I was invited to contribute to a conflict management workshop for the newly-merged department.

In the UniB case, the logic of the technologizing region is undermined by an absence of a common normative basis for establishing an adaptive social and discursive order. At this site there emerges instead a picture of academic staff defending the boundaries of their respective disciplines, and engaged in a competitive struggle for influence over - and participation in – this curricular domain. Apart from differing disciplinary claims to the field of biotechnology, academics are divided by conflicting discursive orientations to the curriculum, with one side arguing a market-driven, skills-based regulative discourse while the other asserts the strong disciplinary order of the cognitive-adaptive position. One department finds itself defending its boundaries in traditionalist style against its closest neighbour, whilst opening its borders to other disciplines and the influence of industry in market-adaptive style, generating an unsustainable regulative contradiction that ultimately requires external intervention to resolve. Recent moves to merge the two departments have yet fully to reconcile a legacy of rivalry and distrust. We also see a further disjuncture (although not illustrated in this chapter), one between staff in these departments and the institution's management, with staff expressing alienation from some institutional policy and senior leadership figures. Thus we see local contingencies conditioning the adaptive potential which should proceed from regionalising developments in the intellectual arena.

At the beginning of the chapter, the question was posed as to whether the relatively vertical, hierarchical knowledge structures of the natural sciences (compared to the comparatively horizontal knowledge structures of the humanities) would provide a more stable basis for programme-based adaptations than was seen in the cases in the preceding chapters. Clearly a key condition for the weakening of insulations between these disciplines and departments has been their shared epistemological base, and the rapidly technologising field of industrial practice. At the outset this process of regionalisation would seem to provide an ideal basis for convergence amongst academics for the purposes of innovative curriculum. This case study illustrates, however, how local institutional conditions can generate two substantively different curricular responses to a changing field of practice. In the UniA case, we see that indeed a new curricular order, and a changed division of labour, is agreed by means of referencing knowledge fields on which there is consensus. I have suggested, however, that a modified social order (in terms of strengthened relations between academics in

the various biological disciplines) was needed as a pre-requisite, and that the absence of this pre-requisite in the UniB case blocked a counterpart adaptive endeavour which referenced the same vertical knowledge structures. Thus while such vertical knowledge structures appear to contribute positively to the chances of this kind of adaptation being successfully undertaken, this verticality is in itself not sufficient, and important social and contingent conditions need also to be addressed.

This suggests that although cognitive motivations remain the most credible basis for adaptive activity of this kind, the social variables, particularly the varying dispositions which animate academics, and their perceptions concerning their material security, are important mediators of how academics respond to these opportunities. Further, it suggests that although disciplinary socialization remains a powerful factor shaping dispositions, contextual factors arising from local institutional conditions (e.g. local organizational cultures and the availability of leadership capacity) play a significant role in modifying such dispositions. We may thus underestimate the extent to which new regulative discourses – and the new identities and solidarities they afford – must be painstakingly negotiated and institutionalised if we are to see robust and stable adaptive practices sustained in the academy. In short, these two cases suggest that the institutionalization of curriculum adaptations of this nature may rely for their stability on an institution's capacity also to bring about appropriate social (and, where necessary, bureaucratic) adaptations.

CHAPTER NINE: CASE STUDIES OF ADAPTATION IN THE NATURAL SCIENCES: INDUSTRIAL MATHEMATICS PROGRAMMES

> The diversity and dynamism of a university's cultural configuration derives from smaller units within it. These are the cultural powerhouses of university life, places where culture is both enacted and constructed and where personal identity coalesces, is shaped and re-shaped. (Trowler & Knight, 2000: p. 30)

This final pair of case studies concerns efforts by adaptively-oriented academics to construct outwardly-responsive mathematics programmes, with both cases being ostensibly (if we take account of the public rhetoric offered in each) geared towards market needs. In the case of UniA, the programme in *Physical and Mathematical Analysis* (*PMA*) was identified by several senior respondents as a site of exciting and energetic cross-disciplinary collaboration, clearly distinct from many other programmes in the Science Faculty where business-as-usual was proceeding in slightly re-packaged forms. At UniB, the idea of the *Mathematics for Business and Industry* (*MBI*) programme (and thus the adaptive logic informing it) actually preceded the programmes policy, and the construct was put forward by the UniB Science Faculty as one of the first 'pilot' programmes in the institution, and again senior respondents suggested at the outset that this was a site of great adaptive promise. As in the previous chapter, the disciplines involved in these programmes revolve around relatively vertical knowledge structures ('hard' disciplines in Becher & Trowler's (2001) terms), although sometimes focusing on the 'applied' possibilities offered by these disciplines, and part of the interest of this chapter will be whether or not the analysis confirms the conclusions emerging from the previous chapter.

As the discussion below will show, however, neither programme seems successful in terms of attracting students, and whether they will prove to be sites potentially stable adaptation in the longer term is open to question. In the first case (UniB)[47], we find a

[47] The respective accounts of these two programmes reflect the varying breadth of data that became available to me at the two sites. The UniB case relies on four interviews, and mostly on just two of these (with BS8 and BS15), since other academics who had participated in the programme were not available, having left the university. These two informants are, however, the main (or the *only*)

context where differing variants of *market-adaptive* orientations between academics work to cloud any common vision that might have formed the basis for an adaptive initiative. In the absence of any attempt at consistent adaptive leadership, the programme takes on the idiosyncrasies of whoever convenes its constituent parts. By contrast, in the second case (UniA), we find a concerted leadership effort to build connective relations across a diverse group of academics predicated on a *cognitive-adaptive* project.

9.1 The Industrial Mathematics Programme at UniB

The proposal for UniB's *Mathematics for Business and Industry* (*MBI*) programme predates the programmes policy and is mainly sponsored by adaptively-oriented individuals in Applied Mathematics as a response to a regionalising field, and with an eye to opportunities in the market. One of these individuals is soon promoted out of the department to a senior management position, and another leaves for another university. The proposal is carried forward in the absence of these primary sponsors, however, by two of the remaining applied mathematicians and the momentum of the programmes policy.

The curriculum structure of the *MBI* draws in contributions from Mathematics, Applied Mathematics and Statistics (although the first two of these departments merge[48] at around the time the programme is established). The three-year undergraduate curriculum makes use of existing established courses in mathematics, applied mathematics and statistics (all of which serve other programmes as well), as well as several purpose-designed courses focusing on industrial applications. A fourth-year Honours programme involves a predominantly problem-based curriculum, drawing on real and role-played problems from industry. The interviews reveal a very strong motivation amongst the programme's sponsors for these curricula to be as industry-focused as possible, and considerable efforts were made to attract individuals with significant industry experience to teach these specialist areas of the programme,

adaptive players in the programme, and their accounts are remarkably consistent with each other in reflecting the dispositions and divisions that characterized this case. The UniA case is based on interviews with four academics who played active roles in the adaptation, as well as documentation. I will reverse my order of presentation, beginning this time with the UniB case, since this enables the contrast between the cases to emerge to best effect.

and to expose students to 'real' industry problems. In this respect, the *MBI* is considerably more outward-looking and market-referenced than it's UniA counterpart (*PMA*), as I shall show later.

Perceptions surrounding the *MBI* programme reveal significant differences in adaptive orientation amongst staff-members in the recently merged Department of Mathematics. These schisms are not simply between the mathematicians and applied mathematicians (in fact these differences occupied relatively little space in the interviews), but are more often between differing orientations amongst the applied mathematicians themselves, and also reflect tensions which operate across the industry-academy border. In some cases the differing orientations are not simply embodied in the varying stances of individuals, but are expressed as ambivalences within one individual over the competing discursive demands that seemingly must be reconciled in contemporary curricula. The two respondents most actively involved in the *MBI* programme can both be broadly classified as *market-adaptives*, but who each represent variants of this disposition which are at odds with each other. These variants are structured in two ways: Firstly (and most importantly) in terms of the respective applied specialisms (engineering or management) of the individuals, and secondly in terms of how the individuals position themselves in the academy-industry relationship. Differences also exist in the respective approaches to pedagogy.

The *MBI* initiative is launched in a departmental context which is traditionally suspicious of such initiatives, and the head of the merged department projects a traditionally-oriented disposition which defends the internal integrity of a disciplinary training pursued in depth. This stance is reflected by mathematicians who believe that vocationalizing an undergraduate programme threatens this integrity, and who are:

> [Q]uite strongly of the opinion that the mathematics that an industrial mathematician should know should be of longer-lasting value than, say, [just the mathematics needed for] financial mathematics. ... The solid classical mathematics, ... you [will] find it in all the new fields all over the place. So I think one might have a flexible programme *after* the degree which can change according to the flavours [of the month]. [These flavours might be] financial mathematics for the next five years,

[48] Relatively unproblematically, by all accounts.

> it might be information management, it might be something else. (BS3b: p. 4. Respondent's emphasis)

Here the respondent affiliates himself with the enduring stabilities of academic mathematics in contrast to what he projects as the relatively fickle 'fashions' of the market. Even an applied mathematician (one of the leading adaptives in this case) who teaches industrial mathematics is himself loyal to the traditional disciplinary identity afforded by an in-depth socialization in academic mathematics:

> And even with the current four year [Honours] program, there are two kinds of maturity that a student needs. The one is mathematical maturity and the other one is what you might call professional maturity. ... There is also much more tolerance from employers ... [if students do] not have a very high level of [professional] maturity. They'll, you know, stick them in the training program and then they'll weed them out within six months or a year. Whereas they are much less tolerant if the students don't have a high level of mathematical maturity, and I'm not convinced that what we produce at the end of four years *is* of a sufficiently high level. (BS8: p. 6)

The same respondent, however, wrestles with a countervailing orientation, inclined towards a pedagogic-adaptive disposition. He points to strongly problem-based counterpart programmes in Europe which displace conventional disciplinary training in favour of problem-driven curricula:

> [T]here's a trade-off. If you become a master of a discipline, that shapes you. You know, certain perceptions, certain ways of working become forced on you, you know, you operate *within* the discipline. And part of the strength of the students from [problem-based learning programmes] is that they are *not* completely moulded in a particular discipline. ... We are trying to get people who are competent within the discipline of mathematics to shed some of the rigidity, you know, to *not* be discipline bound, so they operate effectively in a context where that discipline doesn't fit well. (BS8: p.11-12. Respondent's emphasis)

Although broadly traditional curriculum structures (discipline-based, rather than problem-based learning) prevail in the *MBI* context, the two leading adaptive academics appear to be divided by differing approaches to pedagogy (text-centred vs. student-centred approaches):

> I think that we have quite different ideas about what constitutes talent and how one develops it in a person. ... I think that [BS15] feels that that's not

> really our job - inter-personal skills, presentations, that sort of thing. [In his view] our job is to is to give a discipline-based competence, and some students have what it takes to take such competence into industry and succeed, and some don't. [In his view] it's not our business to try and change the patient. [Whereas] I think that if you give people a challenge and opportunity to deliver up those kind of skills that by and large they will. And if you make them understand that merely developing a high level of Mathematics will not in itself give them that. They need to find a way of interfacing with the people in industry - that's really where the issue lies. (BS8: p.14)

However, a much more serious divergence within this market-adaptive disposition is to be found in a debate amongst the applied mathematicians over where the emphasis of the applied content should fall, as the outwardly responsive adaptations reference distinctly different sectors of the industrial market:

> We had a series of meetings and the trouble that we constantly ran into is that we couldn't agree among us as to what industrial mathematics means, because everybody had their own vision of it. ... [BS1]'s view was more abstract than ours, more theoretical. [He] was more interested in corporate management than we were. ... I had a vision of industrial mathematicians [who] go out and work in the mainstream product engineering end of the business, whereas [BS1] and others [like BS8] had a vision of the industrial mathematicians going in and assisting management to run the company. (BS15: pp.2-3)

The data suggest that differing specialisms within the field of applied mathematics clearly contribute significant resources for differentiating local identities, generating a discursive and social distance between such individuals. In the case of a strongly-defined market-oriented identity (as is the case with BS15), it seems that the social solidarities and intellectual affinities that individuals may have developed with particular sites in industry may be more influential than the solidarities and affinities that may exist in the home department or programme. With a strong engineering bent, BS15's view of the academy is saturated with his many years in industry, and in the interview he frequently distances himself from the academic dimension of his identity:

> We used to have a joke about - you know - in industry we knew a lot more than the university professors, and so from time to time they used to ask us to come and teach courses at the local university, ... and we knew far more from a hands-on standpoint, than these guys who were teaching it. (BS15, p. 17)

This boundary tension which seems to operate across the industry-academy border, suggests that a market identity – an individual who travels across this boundary – may be an uneasy one. The differing nuances of orientation between the two adaptive respondents in this case suggests a continuum of positionality in relation to the industry-academy border. The other market adaptive (BS8) in the case has a less strongly-defined market disposition, and he gazes at industry from the considered vantage of the academy, and considers how his positionality, and his management-focused specialism, prompt inevitable tensions for those dispositions that seek to straddle this divide:

> There's a very strong antagonism from management in South Africa towards mathematics, towards mathematicians. They are wary of mathematics but they are also aware that they need mathematics. ... The common cultural construction of mathematics in South Africa is that it is an air-headed subject. It's abstract, it's remote from reality. ... It's an esoteric thing and you have to be a bit mad to do it. On the other hand, for all that, there's also a resentment because there is the sense that mathematics is powerful, and so people don't believe in the mathematics that mathematicians believe in, but nevertheless they believe in some sort of down-to-earth relevant mathematics. ... So, when there is any mathematics to be done, they would prefer an engineer to do it. That's the attitude of management. (BS8, pp. 3-4)

Given these contrasting positionings within broadly similar adaptive orientations, the two central figures (BS8 and BS15) have avoided conflict by taking on separate parts of the programme (one the undergraduate and the other the Honours programme). In each case, the individuals have drawn mostly on their personal histories and contacts in industry to provide the discursive order and the 'applied' content for the purpose-designed components curriculum. In terms of the social order, it seems that little collegiality, nor much management or leadership capacity, operated in this context and the two key adaptive figures have pursued strongly individualist demeanours:

> I don't think that [we] have worked particularly well together in this program. I think we've got kind of different ways of working and we haven't a strong sense of teamwork. ... I think that there are ... differences in vision but that I take for granted. Why is there not a process for tackling the issue explicitly and getting agreement? And I think that that is basically because of pig-headedness. I think we're all extremely stubborn. ... I think [time is] also very important. I think that we haven't taken time.

> And there has been no kind of management intervention saying that we ought to take time. (BS8, p.14-15)

The Department advertises a senior post to lead the programme, but without success. Young lecturers drawn in to teach on the programme soon leave for more lucrative opportunities elsewhere. Student enrolments drop off dramatically, not least as a result of competition from a neighbouring programme in financial mathematics which has, by all accounts, a tighter vocational focus and the clear promise of lucrative careers. The market-focused initiative must contend with the contingencies of market forces. Given the low student numbers, and the absence of a shared frame of reference among the key academics staffing the *MBI* programme, it is not surprising, then, that subsequently we learn that the *MBI* programme is to be discontinued after 2001.

In summary, then, we see here a programme which emerges organically as a result of adaptive impulses from within a department prior to the programmes policy, which was originally sponsored by senior figures in that department, and which references a potentially lucrative field of practice in industry. However, although this is a programme which draws on disciplinary fields characterized by vertical knowledge structures, thus affording a narrower range of potentially divergent recontextualising principles, the adaptive individuals associated with the programme find little common ground for agreement on the discursive order of the curriculum and conduct their work in individualized ways. Although these respondents are clear about the role of mathematics in industry, they differ between themselves over the appropriate identity for graduates (engineering- or management-focused) and the mode of pedagogy needed to produce such graduates. In the absence of any managerial or leadership capacity or intervention, the staff settle into a division of labour that enables their continuing autonomy from each other, and their distinct curricular regimes. What becomes apparent here is the incompatibility between two dimensions of a policy which calls for adaptive orientations that are simultaneously outwardly-responsive to the market, and inwardly-connective across borders in the interests of discursive coherence in the curriculum. The two adaptive dispositions documented here are market-oriented, but towards different markets, and their social relations within the

institution are necessarily individualized. Thus although this adaptive initiative references the hierarchical knowledge structures of mathematics, the 'applied' or market-related emphasis of the programme opens wider space for divergent views on the discursive order of the curriculum. Consistent with their market-adaptive dispositions, the respondents interviewed here are more aligned socially with constituencies other than each other, and in the absence of strong leadership, their adaptive contributions to the programme remain idiosyncratic. These dynamics within the programme, and the low student enrolments, doubtless contribute to the decision to discontinue the programme.

9.2 The Physical and Mathematical Analysis Programme at UniA

In contrast to the UniB case above where the adaptation was driven by market-oriented dispositions, the UniA case is propelled by more cognitively-oriented motives, in spite of the market rhetoric surrounding the initiative. The case concerns a new programme developed in the science faculty of UniA, called *Physical and Mathematical Analysis* (*PMA*), a three-year degree[49]. The programme is offered by academics from four departments (Mathematics, Applied Mathematics, Physics and Computer Science) across two faculties (Science and Engineering). The claim is made that the *PMA* programme is 'interdisciplinary', and several senior figures at UniA suggested that the *PMA* was a significant departure from the norm of other programmes in the Science Faculty, involving a unique manifestation of teamwork across departmental and faculty boundaries. The evidence suggests, however, that the programme is mostly *multi*disciplinary, consisting of various discipline-based modules offered by participating departments (modules which are also offered to other students in other programmes), with the exception of two project-based courses run by the Physics department which focus on 'interdisciplinary' approaches to problem-solving. This analysis will proceed firstly to discuss the various identity projections articulated by respondents, before considering claims that have been made for an adaptive social order in this context.

[49] Subsequently, an Honours, an MSc and a PhD become available in this programme as well.

9.2.1 Identity Projections

The public discourse of the *PMA* programme website (written by the programme convenor) suggests an adaptive social order with its emphasis in its opening paragraph on the collective and internally-derived provenance of the programme:

> In February 1997, a group of lecturers from these departments got together informally to explore the implications and opportunities afforded by the new education dispensation. In the course of intensive monthly discussions the group has identified problem areas in the current system, debated and formulated principles and philosophy for a new approach, and thrashed out concrete proposals regarding their implementation. (*PMA* website: p.1)

Although the next section of the website is headed "Market and product", the emphasis is on the value of graduates being "literate in the mathematical sciences", and on "independent thinking skills and work habits" (*ibid*: p.1). This section further notes that industry was consulted 'to obtain feedback on first proposals, which have been most positive'. Interestingly, the same section concludes:

> While aiming to become far more responsive to the needs and opportunities in society, we strongly reaffirm our belief in the importance and relevance of tertiary education and of research as valid and rewarding career choices. We envisage that programme graduates, besides having the opportunity to enter industry-related fields, should also be given the opportunity to continue with graduate studies and even academic careers should they so desire. (*PMA* website: p. 2)

In spite of these references to the market, testimony from all key respondents suggests that consultations with industry about the graduate outputs of the programme had not in fact been a significant factor influencing the design of the undergraduate programme's curriculum[50].

> Now the committee thinks that people like that will be useful. I think the flaw in the whole argument might be that the committee didn't widely test industry to see whether there was indeed such a need. They *assumed* that there was such a need. (AS12: p. 2)

Indeed one interviewee (who himself projects a clear market identity) launches a critique of the *PMA* curriculum development process, presenting the view that there was no clear (market-based or other) recontextualising principle with which to adjudicate the competing disciplinary claims for curricular space, resulting in an overloaded curriculum:

> You see the *PMA* has quite a different philosophy, a different approach. What happened there was that they said 'Well it may be a good idea to develop a programme. We don't really know what we want to do with it, but let us start talking.' What they did ... is got them together and then they sat down and they started to talk. And then one person would say 'Well, I think *this* is really important!' And another person would say '*This* is really important!' Important for what? ... It still doesn't have any focus whatsoever. If I want to convince a student to take that, I don't know what to tell them, except that this is really going to be a hard course, because you are going to do a lot more than is standard for B.Sc. students. ... But I can't tell them 'This is what you'll be able to do with it'. (AS16: p.8)

It is clear that the discursive order of the curriculum is not driven by strong external principles from outside the academy. Instead, the convenor argues, the choice of disciplines drawn into the collaboration is based on an awareness of how contemporary knowledge production in these related fields have depended on other disciplinary contributions. The actual content of the discipline-based constituent courses continues to be determined by the internal priorities of the respective departments. The courses often predate the programmes policy, serve more than one programme, and (with one exception) are not purpose-designed for the *PMA* programme. Any external or instrumental purpose is thus at best only weakly conceived or actualised[51].

In the absence of the market as a central motive for the emergence of the programme, what in fact are the impulses driving the *PMA* programme? All respondents agree that the *PMA* initiative is led strongly by one individual (the programme convenor), a relatively junior member of staff at the time (at senior lecturer level), and it "came not

[50] As we see later, the *PMA* grouping establishes industry links in relation to a research project, but does not do so to establish market-referenced principles for undergraduate curriculum construction.

[51] In subsequent comments, the convenor comments: "The PMA is not market-driven, and hence the market is not the central motive. It aims 1) to be relevant to the market, even while remaining a generalist degree, and 2) to open up the opportunities in interdisciplinary approaches and co-operation in academia." (AS9b: p. 11)

from within the power structures, but from outside" (AS9: p.1). The initiative is not strictly a response to the programmes policy – it was mooted before the programmes policy, but gained impetus from the policy, which in the view of the convenor had the effect of opening a space for marginal interests to be asserted. In the interviews, the convenor marks himself off as separate or different from other (mainstream) academic staff at UniA, whom he often characterizes as conservative, or caught up within a heavily bureaucratized institution. By contrast, he sees himself as following the theoretical leading-edge of the discipline, a cognitive project which requires a modified social order in the form of connective relations across disciplinary boundaries.

> That is probably the one thing where the [programmes policy] gave us a break. Because I read the ... [policy] paper ... and thought 'Well, gee, this is our chance to put into practice what has never been possible, even overseas, and that is to go inter-disciplinary with the backing of the authorities!' ... I've been involved in complexity and chaos for a while, so I have a tendency to look at things more inter-disciplinarily. ... The people who discovered the whole complex systems paradigm were mostly physicists, but what they discovered was so fundamental, that we haven't even begun to understand what it will do for us all. ... That has immediately set off cascades and avalanches of insight. And error, too. I don't know if it is as important as quantum mechanics, but I would almost put it on that level. (AS9: p.3)

Although the convenor makes much of the 'interdisciplinary' nature of the programme, there is nevertheless clear support for the value of basic disciplinary training as the core building blocks of students' competence. It is clearly understood that disciplinarity precedes interdisciplinarity. In the course of a long interview, the convenor's *cognitive* interests (in the production of knowledge) are repeatedly foregrounded, while there is little or no mention of the market, or industry, as the primary conditioning factor behind the initiative[52]. Another respondent similarly is at pains to emphasize the cognitive motivation behind his involvement in the *PMA* programme:

> One thing that was a very interesting outcome of this *PMA* has nothing directly to do with students, but with projects that we have all been

[52] "I [and another colleague] have turned down a number of direct requests by some ... firms to participate in projects, simply due to our primary commitments to teaching and research." (AS9b: p. 9)

> involved in. We have projects in seismic monitoring – for the mines specifically. ... For me, personally, that has been the most exciting part, in that I get to work with people from Maths, a little bit from Physics and we all try and tackle the same problem from different angles and talk about it. ... So that part of it is very exciting for me because we all bring our strengths, our perceptions to this problem and for me that is the most exciting part. (AS15: p.2)

Aside from the repeatedly articulated motives of the convenor and others, it is also clear that reforming pedagogy is not a primary motivating factor drawing academics into the collective. Indeed the structure of the programme (made up almost entirely of pre-existing courses serving a range of programmes) has ensured that no purpose-designed modules (with one exception) were possible, and thus little space was available for alternative modes of pedagogy. No interviewee suggests a pedagogic reform project as the motivation for their involvement in the *PMA* programme, and it is clear that in the *PMA* courses it is pedagogic business-as-usual, in the normal performance mode characteristic of most of higher education.

In summary, then, there is clear evidence of a *cognitively*-motivated leadership (on the part of the convenor) drawing these colleagues into a collaborative relationship which is ostensibly predicated on the introduction of an innovative curriculum, but which also emphasizes the possibilities of interdisciplinary work for the purposes of research, reflected in the research-related link with industry mentioned above. There is little or no evidence that the discursive order of the curriculum is driven by market-related priorities, or is in fact adapted in any other way. Further, there is little evidence that the collaboration is motivated primarily by a project of significant pedagogic reform. Instead the *PMA* curriculum emerges as a reflection of what is seen by these academics to be convergences in the intellectual field.

However, not all academics involved in the *PMA* initiative are clear cognitive-adaptive types. As we've seen earlier in this section, at least one respondent (AS16) projects a market orientation, and respondent AS12's ambivalent positioning between traditionalist and market dispositions was discussed in Chapter Five. Although these latter two individuals have formally associated themselves with the *PMA* initiative (their names are on the *PMA* website), it emerges in the interviews that their commitment to the initiative is not as marked as the convenor's. In the face of these

differing orientations, and differing levels of commitment, what are the prospects for sustaining a cohesive social grouping?

9.2.2 Social Organization

The next step of the analysis considers issues related to the task of constructing a modified social order. The *PMA* website makes much of the relationship between the various academics comprising the *PMA* team:

> The team is the heart and soul of the *PMA* programme. It has grown organically over the last two years to encompass a diverse, stimulating, sometimes chaotic crowd. The team meets monthly with the express aim of exchanging ideas and learning from each others' expertise. ... Membership is defined operationally by active participation in *PMA* affairs and of course agreement with its evolved premises and goals. (*PMA* website: p.8)

It seems the grouping met regularly over a period of 18 months to develop the *PMA* curriculum. During the first interview in April 2000, the convenor spoke passionately about the social cohesion that had been achieved:

> But the team was assembled with me as a nucleus, with very little active opposition. ... Some people drifted away and didn't come back. Others stayed and others were re-appointed, and so on. Some went on sabbatical. So it shook itself down to the point where the people who came knew they wanted to come and we actually got to know each other as a group and as people. So it wasn't just the programme, it was the people. The programme [administration] ... was more and more replaced in these meetings by a colloquium situation, where you want to make sure that what we call interdisciplinarity is not something that just consists of a bunch of course codes, but is actually something where people who have the knowledge are talking to the other disciplines, and that has worked extremely well, to the point that now I could probably abandon the *PMA* [curriculum] and still have what we really need. (AS9: p.6)

This is acknowledged by other members:

> I think the direct benefit of all this was that it brought colleagues from different departments, from different faculties, together to talk about what they were doing and what they could do together. ... And this was very useful for us, because one of the nice side benefits of the whole

> process has been the construction of a collegial atmosphere. ... So all of this has really been quite successful so far. It hasn't delivered any graduates yet, true, but it is promising, very promising. (AS12: p.2)

Although the establishment of the curriculum, the informal monthly colloquia and the ongoing contacts between individuals across departmental boundaries signal the promise of group cohesion, these respective activities provide differing potentials for strengthening the basis of the cohesion. The undergraduate curriculum is unlikely to provide a such a platform, principally because the academics seem not to be motivated by a project of pedagogic reform. All the constituent courses of the programme, with one exception, are pre-existing courses provided by the contributing departments. All these courses serve other programmes (with larger enrolments than *PMA*), and thus none are custom-designed for *PMA* purposes. The one course which is custom-designed for *PMA* is designed and delivered by the convenor himself, again providing no platform for cross-border activity. And, as we have seen above, at least one member of the team (AS16) had serious doubts about the logic of the *PMA* curriculum, and in the course of the interview he quickly makes it plain that he is much more committed instead to a rival programme in another faculty, which has been constructed following a strong market-oriented logic. There is thus little or no curriculum-based activity which would lead to the development of shared frames of reference and new solidarities among these academics.

Given that this grouping appears to be primarily motivated by cognitive interests, the role of knowledge production would seem to provide the greatest potential for strengthening intellectual and social common ground. Thus far, however, this dimension of knowledge production seems curiously individualized. All interviewees spoke very positively about their involvement in the seismic monitoring project conducted in collaboration with an industry-based initiative. But rather than the *PMA* grouping working as a cohesive team on this project, it seems that the external private-sector organization instead established separate contracts with individual UniA academics, and it was thus possible for such work to be conducted independent of the auspices of the *PMA* grouping. Communication within the grouping about the seismic monitoring project tends thus to be voluntarist rather than an intrinsic feature of collective organizational learning. It seems that this voluntarist communication around knowledge production weakened what perhaps could have been the key site

for the growth of consensus and a consolidation of a project identity, and thus for a collective (rather than an individualist) fulfillment of the intellectual impulses which motivate these academics.

> I ... tried hard to draw *PMA* lecturers into common cause and teamwork [around the seismic monitoring project], but failed. They did not *want* to be drawn in. Indeed, one or two chose to go off on their own to exploit what they saw as a chance for their own work and pockets. The fact is that *PMA* (and to some extent Physics) prepared the way with [the company commissioning the seismic monitoring project], made the contacts, set up the meetings, had many discussions. Then we invited individuals to become part of what should indeed have become a team effort. The individuals came along, and then proceeded to exploit the new contact to their own advantage, outside of *PMA*. (AS9b: p. 14)

The potential of knowledge production to provide a basis for growing social and intellectual coherence in the group has thus yet to be fully realized. In the meantime, the *PMA* programme attracts a growing number of postgraduate students (often part-time students with jobs in industry), and it is perhaps at this level that the programme's stability may be ensured into the future.

In summary: whilst senior figures in the administration endorsed the *PMA* project with enthusiasm in interviews (e.g. AS10), the new grouping (like many programme groupings) remained unformalised through any allocation of resources or administrative support. The programme continues to attract low student numbers at undergraduate level (e.g. three students at third-year level in 2003), but with a high proportion of these proceeding to postgraduate study. The future of this new adaptively-oriented grouping thus remains to be seen. Although the grouping came into being as a consequence of a curriculum reform project (programmatization), the logic that holds academics within the loose grouping is clearly an intellectual one. The delivery of the curriculum itself provides little ongoing pretext for strengthening the allegiances of the grouping, since at the undergraduate level the traditional insulations persist. The full potential of collaboration in knowledge production, and collaborative postgraduate supervision, has still to unfold, but this would be the logical route for stabilizing and strengthening the *PMA* project in the longer term.

In the meantime, the absence of the formal institutionalization of the grouping (for example in a form that enables the channeling of resources and the development of a distinct and credible identity) has required that the social cohesion for the grouping be provided in the form of charismatic leadership from the convenor. This may not be sustainable in the medium- to long-term, especially against an organizational landscape which remains traditionally structured. Individuals involving themselves in the new *PMA* structure must face Janus-like towards both old and new structures, but inevitably when competing demands arise, it is the old structures which command priority because of their role in resource distribution, and perhaps because of the enduring base they provide for academic identity[53]. The question is whether a programme grouping of this nature will endure in the longer term to provide a stable base for the intellectual work (teaching and research) that is afforded by the disciplinary convergences that have inspired the *PMA* programme.

9.3 Conclusion

Both cases documented above arise from convictions amongst adaptively-oriented academics themselves about the valuable careers that mathematics-trained students could pursue. In both cases, the adaptive orientations (market or cognitive) arise from the respective intellectual socialization of the academics concerned, rather than as a response to the programmes policy. The intellectual histories, for example, of the *MBI* applied mathematicians incline them towards the market, while that of the *PMA* physicist orients him towards cognitive adaptations. In both cases the disciplines concerned have knowledge structures which are relatively hierarchical, and which thus have fairly unambiguous internal principles which should guide curriculum construction. In both cases the resulting programmes are largely constituted through pre-existing disciplinary modules, with the addition of a small number of purpose-designed modules focusing on applications.

[53] The convenor comments on the leadership challenge in this context: " Each of the academics involved [in *PMA*] lives in a department, to which he owes his primary loyalty (Who pays the salaries? Who allocates duties?). Each academic has his own research and set of colleagues. *PMA* is by necessity a second-order priority. ... But again, what does one do in such a constrained situation? You either work within the constraints, accept the sub-optimal situation, or you give up." (AS9b: p. 13)

These similarities end, however, as a consequence of the very different adaptive motivations informing the academics who have driven these initiatives, and the differing levels of leadership provided in each case. In the UniB case, the market-adaptive dispositions have succeeded in establishing components of the curriculum to focus on industry applications, but their differential socializations incline them towards different sectors of the market, and their respective curricula reflect these divergences. Their social relations are similarly independent of each other. These two dimensions thus reflect fairly typical instances of the (D-, S-) market disposition. By contrast, in the UniA case, the adaptive initiative arises from cognitive motives which see advances in knowledge production proceeding from interdisciplinary convergences. Although the convenor would wish to see these developments reflected in the curriculum, his primary goal is to establish connective social relations across disciplinary borders in order to advance existing intellectual interests, an instance of the cognitive adaptive type (D+, S-). What is apparent is that sustaining this cross-border community requires a continuing investment in leadership over time to hold the project in place against the disintegrative gravity of the traditional order of the university and, potentially, the differing adaptive inflections amongst group members. We also see how an orientation towards the market need not provide a basis for cross-border solidarities within the academy. In addition, low student numbers in both programmes deepen the challenge of sustaining a project with only low public appeal. In this way, both cases illustrate the challenges associated with assembling a connective community of adaptively-oriented academics, even when they appear at first glance to share intellectual interests in relatively hierarchically-structured knowledge areas. What emerges clearly is that where the intellectual basis exists for an appropriate adaptation, there is a need for sustained leadership to define the cognitive common-ground, and to work the potential of this common ground in ways that build the social and intellectual cohesion of the grouping. Appropriate institutional conditions are also needed to support such adaptations. It is perhaps significant that the *PMA* programme (with its continued strong leadership input) has survived these challenges, while the *MBI* (which acknowledges a lack of leadership) has been discontinued.

CHAPTER TEN: CONCLUSION

> South African universities, like their peers elsewhere, are thus beholden to their exogenous partners, but not fatally so. ...State and markets are both exogenous forces with variable possibilities, to be treated with variable degrees of caution and strategic guile. Endogenous self-propulsion is probably still the mode best suited to the long term health of the science and innovation system... (Muller, 2003: p. 119)

10.1 Summary of the purpose and design of the study

This study addresses the broad issue of institutional adaptation in higher education, focusing especially on academics who, in contrast to many of their colleagues, seem willing to initiate significant modification of academic practices in response to external, policy-driven pressures for change. In particular, the study looks at adaptive responses to a policy which seeks to implement a programmes-based restructuring of higher education curricula in South Africa, and which implies that academics should collaborate across disciplinary boundaries to ensure that such programmes should be increasingly responsive to the needs of broader society. This reform is of particular significance for the humanities and natural sciences where formative undergraduate degrees have traditionally been focused on the intrinsic priorities of the disciplines rather than the instrumental purposes of the world of work.

Previous international studies (reviewed in Chapter Two) have suggested that academics have both the inclination and capacity to resist external policy injunctions which do not accord with the internal value systems of the academy, and local studies (reviewed in Chapter One) suggest that the programmes policy in South Africa has met with similar resistance. The interest of this study is thus to explore the minority phenomenon where, instead of resisting or complying only rhetorically, some academics seem inclined to comply substantively with the policy. In this way, the study aims to contribute to the literature on institutional adaptation by providing insight into the motivations and experiences of these adaptively-oriented academics. The study thus seeks to understand the motivations and dispositions of such

academics as well as documenting their experience of attempting to implement adaptive initiatives.

Two institutions were chosen for the study, both of them at the elite end of the South African higher education spectrum, in the knowledge that adaptations of this nature are harder to achieve here, and that insight into such dispositions may shed light on what adaptive inclination and capacity may exist in these contexts. Case studies were selected from programmes in the humanities and natural science faculties in each institution, aiming for comparable counterpart programmes from each institution. In each case interviews were conducted with academics leading the adaptations, or who were closely involved in the initiatives. The goal was to document the orientations of adaptively-inclined rather than resistant academics, but where resistant dispositions were closely relevant to progress of the case at hand, these have been noted.

The study draws on an identity-based frame of reference, drawing on the theoretical work of Clark (1983a, 1983b, 1987) and Becher (1989) (and Becher & Trowler, 2001) who have provided accounts of the origin of academic dispositions, and of Douglas (1982a, 1982b) and Bernstein (1999) who have provided ways of theorising culture and pedagogic identity. The study also follows the empirical work of Trowler (1998), Henkel (2000), Maassen (1996) and Ensor (1998, 2002) who have used cultural and sociological frames of reference to explore the responses of academics to changing policy environments. Drawing on these antecedents, and with a view of the data generated for this study, I propose (in Chapter Three) a four-part typology which identifies three ideal-type adaptive academic dispositions and one non-adaptive identity. These dispositions are distinguished from one another by varying orientations to the discursive order (seeking to sustain or change the principles governing the intellectual order of the curriculum), and to the social order (seeking to sustain or change the relationships between academics across departmental boundaries, or between academics and the outside world). The *traditional, non-adaptive* identity in this context refers to academics who are inclined towards preserving established discipline-based principles for curriculum, and preserving the traditional autonomies of academic life. The three adaptive identities are i) a *cognitive-adaptive* orientation where academics are primarily motivated by developments in the intellectual field associated with their disciplinary socialization

(often a hybridized or regionalizing field) to make connections with other academics across departmental boundaries; ii) a *pedagogic-adaptive* orientation where academics are primarily motivated to modify the discursive order of curricula according to principles from pedagogic theory, usually to achieve greater social equity in higher education or greater fulfilment of the learner self, and iii) a *market-adaptive* orientation where academics look to establish relations with constituencies outside the university in order to derive alternative principles for ordering curriculum.

This typology of identities is developed in order to characterize the projections offered by academics to justify their responses in a context of policy-driven curriculum reform. These characterizations are not intended to represent the full complexity of academic identity configurations which are doubtless influenced by a fuller range of professional, as well as non-academic (Trowler, 1998), conditioning factors. It is also understood that identity is contextual and changing, and that the orientations presented by respondents in interviews may change with time. For these reasons I often use the term 'disposition' to describe the varying orientations, to suggest their partial and contingent nature. Further, the use of a limited number of ideal types inevitably involves the reduction of empirical complexity for analytic purposes, although I suggest here and there in my analysis of the data how sub-variants of the ideal-types, or relative positionings within the typology, can begin to accommodate this complexity. The typology, however, enables an analysis which distinguishes differential motivations behind adaptive behaviour and enables an account of the origin of the many conflicts associated with adaptive initiatives, and thus the challenge of sustaining such projects.

10.2 Findings of the study

Although the two institutions under study were chosen for their broad similarities, some significant differences became evident during the course of the study. At the broadest level, it seems that the implementation of the policy at UniA occasioned somewhat less conflict and contestation than did the implementation at UniB, although it is clear that the upheaval at both institutions was considerable. This can be explained in two ways: the first explanation (see Section 5.1) points to the differing legacies of institutional culture at the two institutions, suggesting that UniA's history

of strong centralized authority and respect for hierarchies has lent management in this institution a greater capacity to implement transformative policies, while UniB's history as a traditionally liberal institution, with a collegial culture suspicious of threats to autonomy, presented a potentially more disputatious setting for the reform. The second explanation, not at odds with the first, points to the different interpretations of the policy in the two institutions and suggests that approaches taken at UniA were less fundamentally disruptive of the traditional order (discursive and social) than those followed at UniB. UniA's decision to maintain disciplinary majors as the primary unit of curriculum construction (and thus departments as the negotiating partners) was a less destabilizing strategy than the process at UniB, where individual academics had to negotiate the inclusion of their courses in programmes, or of their specialisms in courses (see Section 5.2 and 5.3, and Chapter Six). A similarity between the institutions, however, was their differential treatment during the implementation of the humanities and the natural sciences, requiring as they did more radical reforms from the humanities.

The central question motivating the study is how we are to account for the relative compliance of some academics to policies which many other academics tend to evade or resist. The following discussion addresses this question, together with the sub-questions identified in Chapter One above. A consistent theme across the case studies is the observation that adaptive dispositions amongst academics in these two institutional contexts tend to arise not as a direct response to the injunctions and values articulated in the policy texts but rather seem to emerge from cognitive motives, often related to the disciplinary socializations or epistemological commitments of individuals, which pre-date the policy. This is suggested in two ways in the data; firstly in the predominance of cognitive-adaptive dispositions over other adaptive orientations, and secondly in the relationship between the disciplinary backgrounds of the academics and the orientations that they project. Firstly, of the 27 adaptively-disposed (as opposed to the nine non-adaptive) academics who are represented in the case studies in the preceding four chapters, over half of them (fifteen) have been coded as cognitive-adaptives, while seven are recorded as market-adaptives and five as pedagogic-adaptives (see Appendix 3). In other words, the cross-border inclinations of these cognitive-adaptives are related to the inherent hybridity of their disciplinary specialization or to contemporary interdisciplinary

developments in their field. While the academics selected for this study do not constitute a representative sample, and thus no quantitative generalizability should be inferred, these proportions are nevertheless predictable given the elite status of the institutions, and the relative seniority of most of the respondents included in the study, and therefore the relative depth of their disciplinary socialization.

Secondly, the other adaptive dispositions (market- and pedagogic-adaptives) may also be related to the epistemological commitments of the individuals concerned. The market-adaptive positions tend to occur when the disciplinary focus is on a regionalising or technologizing field, emphasizing the 'applied' possibilities of the knowledge base. For example, three of the four market-adaptive dispositions noted in the industrial mathematics programmes are applied mathematicians (BS8, BS15, AS16), while the fourth (whose equivocal commitment to the market position is discussed in Chapter Four) is a computer scientist (AS12). Further, the market-adaptive disposition in UniB's *Biotechnology* programme is associated with microbiology, a more applications-focused discipline than the relatively more 'pure' biochemistry. The link between the pedagogic-adaptive disposition and intellectual commitments may be somewhat weaker. Of the academics I have coded as pedagogic adaptives (either as a primary or secondary disposition), two (AH3, BH18) suggested their dispositions were related to their disciplinary backgrounds (socio-linguistics and political studies respectively), while in the case of others (BH4, BH9, BH15) the dispositions seemed related to a more generalized commitment to social equity. Two respondents from UniA (AH11, AH12) referenced official outcomes-based discourses in relation to their pedagogic-adaptive dispositions, and the motivations in these cases are obscure. It is notable, however, that the pedagogic-adaptive orientation occurs almost exclusively in the humanities context.

Thus it would seem that not only is the inclination towards *resistance* to exogenous policies connected with the professional normative commitments of academics, but that the inclination towards *adaptability* also arises from such commitments. In elite settings such as those considered in this study, the wellsprings of adaptive activity that would be considered credible in these contexts will therefore tend to be linked less to the specific injunctions of policies and more to the intrinsic intellectual commitments of the respective fields, and we would thus expect broadly predictable patterns of

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variation in the *dispositions towards* (rather than the actual achievement of) such adaptive activity across these fields. Any such pattern of adaptive dispositions would, however, need to be confirmed through wider, quantitatively oriented studies which encompassed variations across disciplinary types (e.g singulars vs. regions; pure vs. applied), across the relative status of institutions in the higher education field, and across the relative seniority of academics. Such a study would need as its primary unit of analysis the individual academic, given the variations in specialist focus that academics tend to achieve within their broader disciplinary fields, and the influence such specialisms might have on individual dispositions.

A second, parallel theme, however, must be considered simultaneously, and that is the capacity of contextual conditions to influence the outcome of adaptive inclinations. This theme has two dimensions, which I'll call collegial and managerial. The *collegial* dimension concerns the frequent phenomenon in this study where colleagues involved in the same adaptive enterprise are guided by incommensurate orientations. As I have shown in the case study chapters, the four dispositional ideal types used for this study are often at odds with one another, and these tensions can account for the frequent instances of conflict generated in these adaptive contexts. For example, two of the adaptive dispositions (cognitive- and pedagogic-adaptive) are inclined in favour of the reform for quite different reasons: cognitive-adaptives are driven to fulfil an agenda driven from intrinsic intellectual motives arising from their specialisms, while the pedagogic-adaptive seeks to subordinate this intrinsic discursive order to an external regime of (usually reformist) pedagogy. The logic of legitimation in each case is diametrically opposed to the other, as is the basis for any cross-border association that might be attempted. Similarly, the market-adaptive orientation is disposed to fulfil the applied possibilities (and the use value) of the discourse, and is thus primarily inclined to fulfil the instrumental needs of external constituencies (as opposed to the needs of the knowledge producers, or of learners). As we have seen in Chapter Nine, the needs of the 'market' are diverse and thus do not easily provide stable or unifying principles for modifying the traditional order of the academy. Thus for each of the adaptive dispositions, differing knowledges would be prioritized for the curriculum, and either different constituencies would be the natural social partners, or the rationale for the cross-border relationships would differ (e.g. the cognitives to advance hybrid knowledge, the pedagogics to tailor knowledge for learner-centred ends).

We have also seen that a commitment by a group of colleagues from varying disciplines and specialisms to a common regionalising knowledge field does not in itself guarantee an alignment of the varying orientations of these individuals. In a context of relatively horizontal knowledge structures, colleagues coming together to contribute to a newly-established region in that institution (as in film studies at UniB) will bring with them their diverse specialisms, and there may be little basis to resolve competing claims for curricular design or space, since horizontally-structured knowledge areas typically do not achieve integrating or super-ordinate principles. Instead, the management task in such a context is to *contain* diversity, rather than to *resolve* it, in the interests of the common project.

Even in more vertically-structured knowledge areas, however, there are still possibilities for divergent orientations. In the context of industrial mathematics at UniB, I have shown (in Chapter Nine) how two market-oriented applied mathematicians were divided by their respective specialisms, and in the context of the *Biotechnology* programme at the same institution, it became apparent how unifying principles remained elusive in the face of differing dispositions and resilient border tensions. It is the case of the *Biotechnology* programme at UniA (and its contrast with its UniB counterpart) that illustrates how the task of re-ordering social relations across borders must be deliberately managed, even when (perhaps especially when) common intellectual territory is involved. The difficulty of re-engineering the social configurations in these contexts underlines the strong connections between social identity and the intellectual resources that constitute the currency of higher education, especially in elite settings.

The comparative view across the two *Biotechnology* programmes provides, perhaps, the most illuminating basis for identifying the conditions under which adaptations are likely to succeed. As was noted in Chapter Eight, the success of the UniA adaptation was based on a recognition of the changes in the intellectual field of biology (the increasing vertical consolidation of the theory underlying the field), a leadership capacity which worked to establish common agreement across the biology departments of the new salience of this cognitive shift in the field and its implications for the social order within the academy (the new over-arching School) and,

eventually, the discursive order of the curriculum. By contrast, at UniB, although academics there must have similarly understood the cognitive shifts, this perspective was not mobilised as the basis for an adaptive project, and instead the attempted reform led by the microbiologists was based on a supposition of market needs. Rather than forging solidarities within biology, they sought alliances with business, law and engineering, relationships that would be unlikely to find stable integrating principles. Following this, it is possible to speculate that a cognitively-based logic of adaptation is likely to prove more stable than a market-driven one. In order to be successful, market-referenced adaptations will always need to index tightly-focused segments of the market, and will thus need to be highly sensitive to the inevitable changes in that segment. The sharpness of focus, in turn, implies a relative lack of flexibility to cater to wider sectors of the market. Providing more generic, and thus more flexible, forms of provision inevitably means resorting again to internal principles, and thus internal social relations. The drawback of the pedagogic-adaptive position (apart from the political task of re-orienting the sink-or-swim ethic) is that the reforms it proposes are usually relatively high-cost in a climate of shrinking resources and an institutional value system which prioritises research outputs rather than pedagogic inputs. Investment in learner-centred pedagogies may prove too personally costly to be sustained in the longer term across large numbers of academics. The argument emerging here is that achieving longer-term stability in adaptive ventures depends on the capacity to establish stable principles on which to base a reformed social and discursive order. Therefore (for example) where adaptive ventures reference regionalising fields that have not yet achieved vertical consolidation of their knowledge bases, or that are characterized by horizontal knowledge structures (film studies and development studies are examples), a greater management task is required to achieve and maintain social and cognitive coherence. A similar level of strong management would be needed to sustain the higher costs of a reformed pedagogic regime.

This introduces the *managerial* dimension, which (as I have already hinted) includes what is required to initiate and support reforms, where these appear to be legitimate and sustainable endeavours. It is worth repeating at this point that the adaptive

dispositions discussed in this study remain by-and-large aspirational orientations[54], and that frequently these aspirations have encountered difficulties in realizing their adaptive bent, for the reasons outlined above. There is, consequently, a role for management (at institutional level) and leadership (at initiative level) in moving a legitimate innovation forward. It is not the goal of this thesis to discuss differing models of leadership, except to say that the leadership task may differ in varying contexts from, at one end of a spectrum, containing difference and managing conflict in a horizontal knowledge structure setting (as seemed to be the case in *Film, Media and Visual Studies* at UniB) to, at the other end of the spectrum, finding integrative cognitive principles with which to resolve (at least some) divergence and conflict (as was the case in *Biotechnology* at UniA). The role of institutional management, on the other hand, is to recognise how the task of implementing adaptive practices within an institution already shaped by established practices may need wider adaptations to the institutional systems to sustain the innovations. The case studies above illustrate how local contingencies, for example, existing resourcing patterns, associated with established departmental structures, often worked to constrict adaptive inclinations. It may be significant that at UniA, a senior, respected and influential academic (AI2) was seconded as a roving facilitator to assist the programmatization at that institution, and seemed to have played an important mediating role between management and academics when needed. In contrast, a 'core group' appointed to play a similar role at UniB was disbanded after a short time, leaving no 'safe' channel of dialogue between academics and the centre, nor the means through which management might closely monitor developments on the ground.

10.3 Implications of the study

This study has implications for broader issues related to institutional adaptation. Firstly, the observations noted above about the strong relationship between developments in intellectual fields and the inclination towards adaptive practices

[54] Adaptive dispositions are by definition individuals for whom the existing order presents a constraint on the fulfilment of their normative inclinations. Adaptives may be so inclined because their primary disciplinary socialization cannot be fully exercised in the current order, or because subsequent induction into changing knowledge areas or value systems prompts them to look beyond the current order, in which case their adaptive selves may be working off a traditionalist base, accounting for those cases where my analysis needed to accommodate primary and secondary socializations and to acknowledge differing levels of investment in these varying personas.

suggests that attempts to achieve sweeping policy-driven curriculum reforms that impact uniformly across the board are misguided in assuming that adaptation can be achieved consistently across differing disciplinary contexts. It is clear that some contexts may be inherently more amenable to adaptation than others, and that such amenability will depend on the possibilities afforded in the respective cognitive realms, the extent to which existing staff members are aligned to these cognitive affordances, the management capacity available to mobilise and sustain the adaptation, and whatever resourcing may be needed (including what I have called 'adaptive capital' – a willingness on the ground to absorb the costs of change). Attempts to force change where such cognitive amenability is not present, or where the appropriate intellectual or management capital (Muller, 2001) is not sufficiently available, may result in costly and damaging upheavals which ultimately prove to be a deterioration in an institution's capacity for legitimate responsiveness. In these cases, the role of policy-driven reform (or 'top-down' initiatives) should be to open up the space for the instances where an intrinsic ('bottom-up') logic would support an adaptation, and then to provide the conditions for the adaptation to prosper in its institutional setting.

This approach echoes the argument made by Cloete, *et al* (2002) for an approach to policy which acknowledges a diverse higher education landscape and which proposes concomitantly differentiated measures to address distinctive needs. Where Cloete, *et al* comment on how policy should address a diversity of institutional conditions, the argument made in this study is that curriculum policy should be similarly sensitive to the diversity of adaptive affordances in disciplines (and their particular instantiations in institutions). Rather than being a prescription for *laissez-faire* conservatism, this argument instead focuses attention on the development of appropriate management capacity in higher education. South Africa's debate on the higher education sector's capacity to manage necessary transformations has tended to focus on the top leadership of institutions (for example: Kulati & Moja, 2002; Bell, 2003), but this study illustrates the crucial role that middle-level management plays in bringing about legitimate adaptation. Academic middle managers (deans, heads of department, programme convenors and non-formal leadership figures), in dialogue with their respective epistemic communities, should be in the best position to assess the adaptive possibilities within their intellectual territories and to mobilise around these when

appropriate. As we've seen in the majority of the eight adaptively-inclined cases from the two elite institutions examined in this study, the capacity to appropriately conceptualize adaptations, and then realize these initiatives in sustained ways has, however, often been very limited, suggesting that this management capacity may be generally under-developed in South Africa's higher education sector. What would constitute appropriate management capital for this juncture of rapid transformation is the subject for another study, but a sensitivity to the cognitive, social and institutional dynamics illustrated in the chapters above is clearly essential.

10.4 Limitations of the study

This study is limited in its scope in several ways. Firstly it focuses only on institutions at the elite end of the South African spectrum of institutions, and therefore (as Trowler, 1998, has illustrated) may not reflect the adaptive inclinations of academics across the full range of institutions. Secondly, the study has tended to include relatively senior academics (senior lecturer and above), since these were the figures most often involved in leading the adaptive projects. There may well be adaptive inclinations amongst younger academics that tended to be eclipsed in these processes. Thirdly, the study focuses only on developments in the humanities and natural sciences of the respective institutions and so does not include the dynamics at work in the professional faculties whose 'applied' orientation may dispose academics more readily to particular modes of adaptation. The study thus focuses on only a limited constituency in South Africa's higher education sector, and the patterns emerging in this study should not be seen as applicable to the broader sector, unless supported by further studies.

The study also focuses on limited dimensions of professional identity. There are undoubtedly other dimensions of identity which operate in academic contexts as well. Given South Africa's sorry history, it is certain, for example, that racialized and gendered identity will play an increasingly visible and significant role as the sector undergoes the rigours of transformation. The academics included in this study tended mostly to be white and male, although black and female colleagues were also included. In the context of this study, with its focus on curriculum reform, race and gender did not emerge from black and female respondents' accounts as determining

factors, but these issues are very likely to become more visibly salient as social (and possibly epistemological) factors in these institutions as transformation-oriented initiatives continue to contest the established order. The study has also not included any consideration of 'personality' in the analysis of academic dispositions, since such an analysis would need to draw on an entirely different theoretical base.

The study is also methodologically limited in that the data-gathering follows a cross-sectional design, providing a snapshot in time across multiple cases. What this design affords in breadth across cases, it constrains in depth within cases, limiting the view available for each case. For example, I have only been able to document sketchily the role of leadership in initiating and supporting adaptive initiatives over time, a dimension whose salience became increasingly apparent as the analysis was concluded. Having now established a cross-sectional view, it is likely that a longitudinal design, which follows fewer cases but over a longer period of time, will yield a more detailed understanding of the trajectory of adaptive initiatives. Further, a longitudinal design may address some of the interpretive difficulties associated with an interview-based methodology (discussed in Chapter Four), providing data sourced across a span of time and emerging from more clearly-established relationships between researchers and respondents.

I have already noted (in 10.1 and 10.2 above) the yield and the constraints associated with the use of a two-dimensional, four-part typology as an analytic framework, and it is possible that more detailed longitudinal studies could elaborate this framework into a more sensitive instrument that documents important distinctions within the ideal types in ways that this study has only touched on.

10.5 Directions for future research

This study suggests that the phenomenon of adaptive dispositions in higher education warrants further research both in terms of breadth and depth. To achieve a broader view of the incidence of adaptive inclinations and their varying types, it will be important to document systematically the range of adaptive dispositions across varying contexts (especially disciplinary fields and institutional types), why and how adaptations are initiated and the conditions that contribute to their success or

otherwise. Such research needs also to be conducted in greater depth than possible in this study, aiming for detailed longitudinal studies of key sites of adaptation over time. The focus of interest of these studies could include:

1. An examination of the epistemic communities that are referenced by adaptively-oriented academics: Do all the adaptive types identified in this study reference peer communities in the same way, and do these communities have any characteristics that differentiate them from each other? If such differences exist, what might be their implications for academic practices?

2. What is the role of leadership in initiating and supporting adaptation? Are there significant differences across disciplinary contexts in the kind of role that adaptive leadership at initiative level must play? Neumann (2001) and Neumann *et al* (2002) have made the case that "Becher's classic study of academic tribes and territories needs to be extended into the realm of teaching and learning, to tease out the epistemological and social factors" (Neumann, 2001: p. 144). Becher's frame of reference could usefully be extended also to leadership practices, equally considering the social and epistemological dimensions of leadership.

3. What is the role of management in initiating and supporting adaptation? What would be the characteristics and requirements of an institutional policy which acknowledged differing logics of adaptation across disciplines and faculties? How would this be reflected in management practices and systems within an institution?

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3. What is the role of management in initiating and supporting adaptation? What would be the characteristics and requirements of an institutional policy which acknowledged differing logics of adaptation across disciplines and faculties? How would this be reflected in management practices and systems within an institution?

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APPENDIX ONE: INTERVIEW QUESTIONS

A. Curriculum Structure Issues

1. How has the term "programme" been defined in this faculty?
2. What problems or needs are resolved by this formulation? (probe for issues of knowledge and/or changing educational vision) How different are these 2000 curricula from what students would have - in effect - done in the past?
3. What is the rationale for **this particular** programme? Which impulses and opportunities does it respond to? Or, what existing qualities and approaches are being preserved? Will qualitatively different graduates be produced by these new curricular forms?
4. Characterise how the various disciplines contribute to the programme (refer to instrument) How much is transplanted in chunks from the old, and how much is newly developed?
5. Has the amount of optionality allowed to students increased or decreased? Is this a positive or negative development? Why?
6. What is the role of compulsory core courses in this programme?
7. What is the relationship between the components or modules of the programme? Are they aligned with each other in any deliberate way? Why or why not?
8. How is "coherence" defined in this programme? What is the value of this quality? Do we have more of it now than in the past?
9. Is this structure likely to be stable? Why (not)?

B. Social Relations Issues

10. What processes were involved in developing the curriculum for this programme? Who was involved, and how was it organised?
11. How is the programme administered, through which organisational structures?
12. What is the relationship between the programme and departments? Do you think relationships between individual academics, and between disciplines, will undergo any kind of change because of programmatization?
13. Has your relationship with the outside world (industry or community) changed?
14. If new patterns of activity or organisational structures (different from past practices) have emerged, what has been their effect, especially on your role and fulfilment as an academic?
15. Can you characterise your key reference points to judge the quality of curriculum: colleagues in your dept, or colleagues in your field of specialisation, colleagues in the programme, figures in industry, etc?
16. Was there any conflict? If so, over what issues? How were these conflicts managed or resolved?
17. Do you expect research priorities of academics contributing to this programme to be influenced by - or linked to - this programme, or any other dimension of the programmatisation process?
18. What have been the outcome of the programmatisation process: Any new opportunities and achievements, and what have been the constraints and casualties? Dilemmas and compromises?
19. Is the purpose of university education being advanced by the changes?
20. Do you feel your position as an academic is being strengthened by these changes?
21. How has the policy of programmatization has been carried out more broadly in the Institution and the Faculty?

APPENDIX THREE - RESPONDENTS USED FOR CASE STUDIES

For this study, altogether ninety-five interviews were conducted with eighty-two informants at various levels in the two institutions under study, including deputy vice-chancellors, deans, programme convenors, lecturers, educational development staff and some administrative staff. The data reflected in the case study chapters, however, are based on data collected from 36 respondents most closely involved with the eight case studies finally selected for inclusion in the thesis. Data from interviews with a further six respondents are reflected in Chapter Five ('Institutional Contexts'). The respondents associated with each case study are listed below, together with the primary (and, where necessary, secondary) codings assigned to these individuals.

Programme	UniA	UniB
Humanities 'General'	AH2 – trad AH3 – ped AH4 – cogn AH6 – cogn/trad AH14 – trad	BH1 – cogn BH2 – cogn BH3 – market BH4 – ped/cogn BH5 – cogn BH7 – cogn BH9 – ped
Development Studies	AH1 – ped AH11 – ped AH12 – trad	BH11 – trad BH15 – cogn/ped BH18 – cogn/ped BH19 – trad BH25 – trad BH26 – trad
Biotechnology	AS1 – cogn AS4 – cogn AS5 – cogn	BS10 – market/trad BS11 – cogn BS12 – market/trad BS13 – market/trad BS14 - cog
Industrial Mathematics	AS9 – cogn AS12 – market/trad AS15 – cogn AS16 – market	BS3 – trad BS8 – market BS15 – market

Totals for primary codings:

Traditionalist	8	Cognitive	15
Market	8	Pedagogic	5
Total	36		

KEY: Trad: traditionalist Ped: pedagogic-adaptive
Cogn: cognitive-adaptive Market: market-adaptive

APPENDIX FOUR - DOCUMENTARY EVIDENCE COLLECTED FOR THE STUDY

The following documentary sources of evidence were amongst those collected from the two institutions during the course of the study (the list provided below is not exhaustive, but reflects those documents that were used directly or indirectly to develop the analysis)

UniA	UniB
• Academic Planning Framework. • Strategic Priorities for Learning and Teaching at UniA. • Guidelines for the Interim Registration of Qualifications. • Coherence as a Characteristic of Undergraduate Programmes. • Format for Proposals for Undergraduate Programmes (Humanities Faculty). • Evaluation Form for Undergraduate Programmes (Humanities Faculty). • Undergraduate Programme Development in the Humanities Faculty. • The Co-ordination of Educational Programmes. • Minimal Desiderata for Programme Development. • Breadth and Coherence as Desiderata for Undergraduate Programmes • Factors in Programme Evaluatiuon: A Concise Overview. • Memorandum: The development, submission, and evaluation of the forthcoming educational programme offerings and mix at UniA. • Promotional materials for individual academic programmes. • Publications from UniA's educational development unit. • Undergraduate Prospectus 2000.	• Strategic Planning Frame work • Academic Planning Framework • Assessment of the Values of the Institution. • Programme Planning and Implementation within UniB's Academic Planning Framework. • APF: From Principles to Planning and Implementation. • Second Round Implementation of the Academic Planning Framework. • Academic Planning Working Group: Report to the Strategic Planning Committee, June 1998. • Format for the Presentation of Programme Proposals. • Humanities at UniB. (promotional booklet) • Faculty of Humanities Student Handbook: Undergraduate Studies. 1999. • Faculty of Humanities Student Handbook: Undergraduate Studies. 2000 • Faculty of Science Student Handbook: Undergraduate Studies. 1999. • Faculty of Science Student Handbook: Undergraduate Studies. 2000. • Minutes of the Academic Planning Working Group 1997 - 1999. • E-mail exchanges between academics associated with the *Biotechnology* programme.

• Humanities Faculty Handbook 2000 • Science Faculty Handbook 2000	• E-mail exchanges between academics associated with the *Development Studies and Social Transformation* programme. • Guideline papers prepared by UniB's educational development unit.