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## Seeking Impact and Visibility

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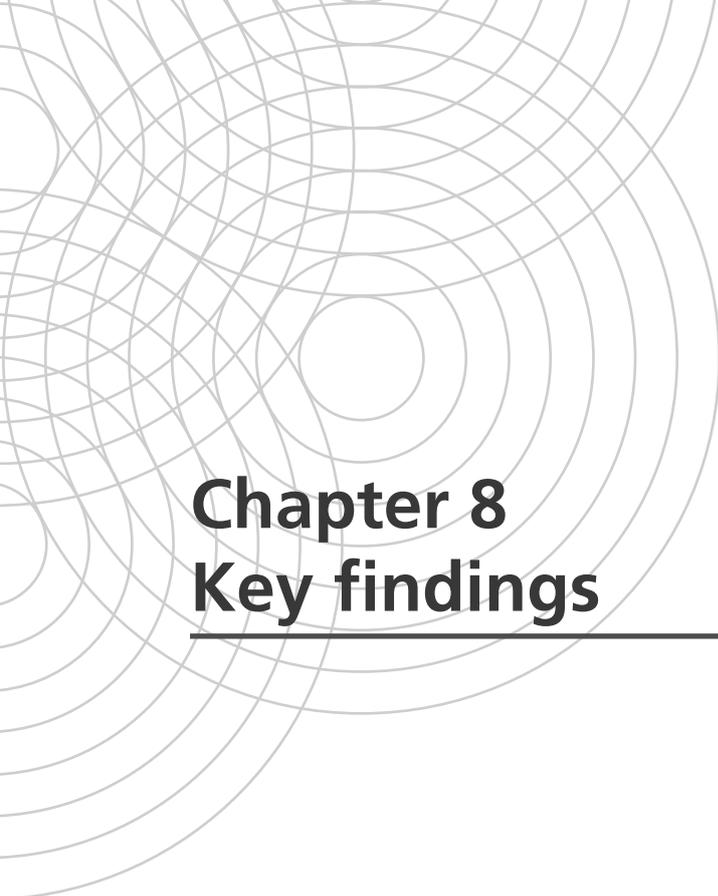
# Chapter 8
# Key findings

In seeking to answer our two research questions concerning the state of scholarly communication at Southern African universities – of Botswana (UB), Cape Town (UCT), Mauritius (UoM) and Namibia (UNAM) – and how ICTs and open access publishing models can improve that state with appropriate institutional support, SCAP has amassed a substantial amount of data on university practices, policy landscapes and levels of e-readiness. We have analysed that data in the previous chapters, but here we condense that analysis into a single chapter where we present our key findings.

Before we begin, however, it is worth foregrounding a foundational assumption concerning regional scholarly visbility that we have confirmed through our research.

⇨ *Finding 1. Southern African research is comparatively marginal and invisible in the global context of academic research production.*

This coincides with the literature that shaped our initial assumption and was certainly true for UB, UoM and UNAM, though less so for UCT, which enjoys a certain level of visibility. The three national universities, however, each belong to countries with small populations, tiny higher education sectors, modest financial bases and teaching-oriented tertiary education systems, which make it difficult for them to achieve distinction through traditional academic indices (such as WoS-rated journal article production).

This general condition of marginality and invisibility is due to both external and internal factors. Externally, the wealth and productivity of Northern institutions (and increasingly other Southern ones in China) simply dwarf the research potential of the smaller Southern African countries, a fact that will not change soon. However, it is also influenced by internal factors which, if altered, could increase its reach, prestige and relevance.

In this chapter, we highlight the key findings from our research as they pertain to the four universities' research and communication practices, policies and infrastructure and capacity. These comprise the internal factors influencing the visibility of Southern African scholarship and offer points of contact for interventions that seek to improve them.

## Research and communication practices

To understand the state of scholarly communication at these four universities, we focused on the research and communication practices in the Faculties of Humanities (FoH) at UB, Commerce (Comm) at UCT, Science (FoS) at UoM and Humanities and Social Sciences (FHSS) at UNAM. At UoM and UNAM, these faculty-level research sites also acted as our pilot sites for implementation activity, while at UB and UCT, pilot activity occurred in the Department of Library and Information Studies (DLIS) and the Southern African Labour and Development Research Unit (SALDRU), respectively, which were part of the chosen faculties. Because our various research instruments obtained information at the institutional, faculty and departmental levels, we were able to shed light on each in turn. Here, however, we focus on how those insights apply across all four sites so as to give some indication of how scholarly communication may operate more broadly at the regional level. Though this analysis of the four sites cannot be said to be truly representative of the entire region, it does offer suggestive insights that can be used by scholars, managers, policymakers and funders in Southern Africa. Therefore, we will be as explicit as possible about the scope of each finding so that readers can see the complexity of these nested ecosystems. In general, if a finding conforms to the majority of our institutions and scholars, we refer to that as having "Southern African" significance (with the usual caveats).

### Values

To get a full picture of Southern African scholarly communication practices, we started by trying to grasp academics' motivations for conducting research and publishing their findings in the first place. Based on numerous interviews, surveys, conversations and observations with members of the four universities, we found that all Southern African scholars were motivated by both extrinsic and intrinsic factors, but when aggregated and ranked, the most powerful motivations were: compliance with the institutional mandate to produce research (UB FoH), conformity to peer expectation to produce research (UCT Comm), congruence with personal desire (UoM FoS) and the desire to generate new knowledge and enhance teaching (UNAM FHSS). While these scholars shared a number of other motivations – such as for promotion, to aid national development and to obtain indirect financial rewards – the most important motivations listed here were the products of their unique scholarly communication ecosystems.

➪ *Finding 2. Southern African scholars are motivated to produce and disseminate research for both intrinsic and extrinsic reasons, including: the institutional mandate (UB FoH), peer expectation (UCT Comm), personal desire (UoM FoS) and to generate new knowledge and enhance teaching (UNAM FHSS).*

These differing motivational factors make sense in their given contexts. UB scholars' high responsiveness to an institutional mandate is understood in a context where teaching has long defined scholars' identities and the administration's centralised managerial culture has guided academics' actions. The mandate has served as a crucial mechanism for encouraging scholars to incorporate research into their work. UCT scholars operate in a competitive, comparative and collegial context where there is a high peer expectation to produce research. It is the product of a strong research culture that has been developed

over decades and supported by substantial resources. UoM scholars work under an administration that is highly centralised, but also quite weak, so they are free to choose how productive they want to be in terms of research. Thus their activity is shaped primarily by their personal desires. Meanwhile, UNAM scholars work in a developmental context which is both young and teaching-oriented, thus they are motivated to produce research to generate new knowledge and to enhance their teaching.

However, despite our initial assumption that all scholars would want to produce and disseminate their research, we soon learned that not all Southern African scholars want their work to be visible.

⇨ *Finding 3. Not all Southern African scholars want their research to be visible.*

For a number of personal, social, cultural and professional reasons, some academics at UB, UoM and UNAM (but not UCT) revealed that, though they want their research production to count towards their performance assessments, they would prefer that their research – or at least some portion of it – remains unseen. The reasons they give for this stem from:

- anxieties about quality, peer judgment and community exposure (especially if they doubt the value of their research contributions)
- a culturally informed sense of modesty (where it is considered improper to engage in self-promotion, such as calling attention to one's own work)
- a minimalist communications strategy (where dissemination is achieved through reading a paper at a conference, or perhaps allowing a journal to publish it, but nothing further)
- fear that others may steal their ideas/data (especially if still in gestational form)
- a teaching- rather than research-oriented approach to scholarship (which speaks to one's sense of academic identity, as a teacher rather than a researcher).

While most Southern African scholars are keen to share their research with the world, it is crucial to remain cognizant of the reasons that some would have for hiding their work, as a number of these rationales are likely to be relevant in marginalised, postcolonial settings in which academics face significant resource and access constraints.

## Research production

Most Southern African scholars say that they spend the majority of their time engaged in teaching-related activities (timetabling, prepping, lecturing, marking, advising, invigilating, etc.). They also say that they shoulder significant administrative duties. This was certainly the case at UB FoH, UoM FoS and UNAM FHSS, though most UCT Comm scholars were able to balance their research and teaching activities more equitably. Such heavy teaching and administrative requirements would be reasonable at institutions that still see themselves as teaching-oriented universities, but for these that seek to become more research-oriented, the high teaching and administrative demands hinder their universities from achieving the objectives of their new research-informed missions.

⇨ *Finding 4. Heavy teaching and administrative loads hinder research production in Southern African universities.*

This finding conforms to the image presented by other studies of African higher education which show that scholars across the continent are burdened by similar challenges. The simple lack of time available for carrying out research has a massive impact on whether African scholars can pursue research projects, or whether they can do so with any regard for quality and consistency.

However, for the scholars who are able to make time for research, many claim to face serious funding hurdles, especially at UB, UoM and UNAM (and less so at UCT). Many scholars are unable to source funding for their projects, either international or locally, while those who can must rely mostly on the limited funds that their universities offer.

⇨ *Finding 5. The majority of Southern African research projects are either unfunded or funded by their universities.*

Considering that the four universities that we profiled were some of the more prolific in the region (each was the top producing university in their respective countries) and belonged to countries that had moderate financial resources (especially as compared to their neighbours), the challenges of research funding are likely much greater across the rest of Southern Africa.

The result of this unfunded and university-funded research is that scholars must try to achieve their research aims with limited financial resources. This impacts the size, scope and ambition of the kinds of research projects in which they engage.

⇨ *Finding 6. Many Southern African research projects are small, local projects, confined to an immediate geographical area.*

One way in which Southern African scholars try to overcome this limitation is by participating in consultancy research, an opportunity in which their universities encourage them to engage. Though consultancy work can often draw scholars away from their primary research interests to attend to those of their funders, it can sometimes compensate for doing this by allowing scholars a chance to engage in empirical research and contribute to projects that may have national development potential. The major problem, however, is that these consultancies are often bound by strict confidentiality clauses, disallowing them from publishing their results.

⇨ *Finding 7. Consultancy research often offers Southern African scholars their only opportunity to do empirical research, though they are rarely able to leverage it to boost their scholarly profiles through academic publication.*

**Outputs**

Every university recognises research outputs differently, weighing each according to the values that it is trying to promote through its scholarly performance assessment system. At universities such as UCT, scholar-to-scholar outputs in high-prestige publication channels (WoS-rated journals, etc.) are prioritised far above outputs aimed at other audiences, while at more development-centred universities such as UB and UNAM, reward and incentive structures encourage scholars to produce a diversity of outputs aimed at local and international audiences, scholars and non-scholars.

⇨ *Finding 8. Scholars at prestige-oriented universities in Soutern Africa are incentivised to produce high-Impact Factor scholar-to-scholar outputs while scholars at development-centred universities are encouraged to produce a wide variety of scholarly outputs that can reach multiple audiences.*

One of the inadvertent challenges that results from this for the development-centred universities is that they sometimes struggle to build their academic cores because their scholars are rewarded for outputs that do not necessarily require fresh, empirical research. Because they are less challenging to produce than peer-reviewed high-Impact Factor scholar-to-scholar outputs, it can take a longer time to build up the kind of robust research cultures that universities desire. This does not mean that it will not happen, just that it may take longer.

⇨ *Finding 9. Many Southern African universities produce a lot of outputs that are interpretive, derivative or applied (rather than the product of fresh, empirical research), due in part to institutional reward structures and funding challenges.*

During this build-up phase towards a more dynamic research culture, this focus by Southern African academics on such outputs is perhaps inevitable. Indeed, it may be more important at this time for universities to focus on simply increasing the production of outputs by its scholars, creating greater research capacity so that, in the future, more academics will be able to engage in high-level, empirical research. For the moment, however, many Southern African scholars will feel pulled between quantity and quality, between producing outputs to satisfy an external requirement and producing outputs that might have an impact on their field.

**Communication**

While the Southern African scholars we engaged were quite interested in finding ways to increase their research productivity, they were far less responsive to the changing communication opportunities that new ICTs offer for disseminating their work. For the most part, they confine their communication activities to traditional modes. At UB, UoM and UNAM, that would often mean reading their papers at regional or international conferences, sharing drafts with colleagues who request copies, incorporating insights from their research into classroom teaching or submitting their

articles for publication in journals. At UCT (and to an extent at UoM as well), this would mean producing scholar-to-scholar outputs to be published in high-Impact Factor journals, books and conference proceedings. While the open access movement and availability of free online tools have expanded the opportunities for individual academics to profile their work on the internet and seek out collaborative partners, most Southern African scholars have yet to take advantage of them.

⇨ *Finding 10: Most Southern African scholars do not utilise social media technologies in their scholarly work because they lack knowledge about them, training in how to leverage them and the time to be able to incorporate them into their research and dissemination practices.*

This means that Southern African scholars typically rely on face-to-face contact for disseminating their work, or they leave it to commercial publishing firms to handle. They usually do not have a strategic dissemination plan that leverages the online platforms that would give greater visibility to their outputs. Nor are they encouraged to do so by their universities, as they receive no rewards or incentives for publishing in open access journals or profiling their work on institutional repositories (IRs). One of the consequences of this is that Southern African research often does not reach the audiences that could most benefit from it, such as government policymakers, development NGOs or community leaders.

⇨ *Finding 11: Southern African scholars rarely communicate their findings to government.*

This is compounded by the fact that few universities in the region have open access policies that would increase the likelihood of their scholars' outputs reaching such "stakeholder" audiences. Some of the reasons for this include scholars' caution about open access (especially at UCT and UB), scholars' lack of outputs to make available in the first place (such as at UNAM) and the impact that disciplinary communication norms have on whether open access is feasible.

⇨ *Finding 12: Southern African scholars' perception of open access dissemination is influenced by personal, historical, cultural, disciplinary and economic factors.*

## Networks and collaboration

Southern African universities are characterised by highly variable levels of connectivity institutionally, nationally, regionally and internationally. Even though most universities desire to enhance their networks and number of collaborative engagements, each university's network profile is quite unique.

At UB FoH, scholars say that they do not communicate with each other much (due mainly to a lack of time and fora for doing so), though they enjoy reasonable levels of connectivity with regional and international scholars (with whom they meet at conference events). UCT Comm scholars are highly networked within their faculty and internationally, but not so much with non-faculty members in their own institution. They also enjoy good connections with non-academics – such as civil society and industry personnel – as their work has applicability in a variety of contexts. UoM FoS

scholars do not collaborate much with each other or others in the country, but enjoy extensive networks overseas (where most scholars who share their research specialisations are located). At UNAM FHSS, many scholars do not feel part of any type of research network or community yet, but those who do enjoy solid levels of connectivity within their faculty and internationally.

⇨ *Finding 13: Southern African universities desire greater levels of collaboration, but each institution is characterised by highly variable levels and types of scholarly connectivity.*

Despite these universities' drive to become more connected with other universities, many face significant financial and practical obstacles in pursuing research collaborations, especially with African partners who themselves must deal with their own constraints. Thus, for a number of reasons, they often end up collaborating with Northern-based research projects that require an "African partner".

⇨ *Finding 14: Southern African scholars typically find it easier – for financial and practical reasons – to collaborate with scholars in the global North than in the rest of Africa.*

**Research culture**

The research, communication and networking conditions in the region have developed what we can call "nascent" research cultures at most Southern African universities. Aside from UCT, which boasts a comparatively strong research culture, UB, UoM and UNAM are still in the process of building up their research cultures. While these universities are taking important strides in developing a more robust academic core based on new research missions, its completion will take time.

⇨ *Finding 15: Most Southern African universities have "nascent" research cultures.*

This description is warranted for the three universities because:

- there is a low level of networking, collaboration and communication between colleagues, even within the same faculty space
- there is a low sense of peer expectation regarding collegial research production (i.e. colleagues do not put pressure on each other to publish)
- there are comparatively low participation rates in journal review editorial boards, meaning that scholars are not shaping their fields as much as following what others are doing
- there is no national research body in Botswana that could spur greater research opportunities for faculty members, nor a national research fund (yet) in Namibia, where scholars can go if they fail to get univerisity funding, or if they need large amounts of money to pay for ambitious research projects. (This is, however, available in Mauritius.)

This description is likely to change in the future as these universities continue to invest further resources in their research missions, and as the national governments build up research capacity through the establishment of research foundations, councils and funds.

## Policy

Southern African universities enjoy varied levels of policy development, not only in terms of their research strategies (which are relatively well established) but also in terms of their communications strategies (which are largely undeveloped and only now receiving attention). How these policies are established and enforced, however, is often the result of the kinds of institutional cultures that define policy-related activities.

### Institutional culture

The diverse histories, ages, demographics and missions of Southern Africa's universities have given rise to a multiplicity of institutional types whose dominant characteristics help us to understand the implicit norms of their scholarly communication ecosystems and how managers and scholars operate within them.

UB's institutional culture is managerial, in that it has a strong, centralised authority that wields power in a paternalistic, top-down fashion. This concentration of power has been useful in helping to speed up the process by which the entire institution falls in line with the new research mission and the open access ethic that the administration has (partially) embraced. But it has also bred resistance by faculty members who feel that their voices are not being heard by the administration and that its various initiatives (such as the institutional repository) are for the glory of the administration, not the benefit of the academic staff. This means that even good ideas lose credibility if the process by which they were initiated is viewed cynically.

UCT's institutional culture is collegial, in that power emanates from the faculties, individual scholars enjoy great autonomy and intellectual freedom, and the central administration is highly responsive to its academic staff. This is useful in that most of the policies that are eventually adopted enjoy great legitimacy because they are the product of extensive consultation across the institution. But the downside is that, because scholars operate in faculty silos, it can take a long time for otherwise good ideas (such as open access) to be adopted, especially if disciplinary norms militate against them.

UoM's institutional culture is bureaucratic, in that is characterised by a highly centralised administrative structure that is nevertheless quite weak. Thus, on one hand, the administration employs a variety of bureaucratic processes which ensure that even the smallest decisions made by academics refer to the administration for official approval ("red tape"), thereby centralising authority within the institution. But on the other hand, it has largely vacated the strategic role that it should play in shaping the policies structuring research and dissemination activity, leaving scholars on their own to decide how much research they would like to conduct and how to communicate it.

UNAM's institutional culture is developmental in that leadership is not centralised (in a managerial fashion) nor decentralised (in a purely collegial sense), but is distributed across faculties where senior scholars (or "elders") act as models that exemplify good research behaviour to others and, in turn, develop their capacity. These senior

scholars often occupy positions of leadership in faculties, departments or committees, distinguishing themselves by their solid research and publication records. It is they who lead by example, often mentoring junior scholars in the process. Power in this system is not top-down (managerial) or side-to-side (collegial), but front-back (developmental).

⇨ *Finding 16. Southern African universities are shaped by diverse institutional cultures: UB's is managerial, UCT's is collegial, UoM's is bureaucratic and UNAM's is developmental.*

Each of these cultures inspires different reactions from the academic staff when new proposals, such as open access, are considered.

## Open access

Southern African scholars have varying sentiments about open access, but within our study, UoM FoS and UNAM FHSS scholars were the most positive while UB FoH and especially UCT Comm academics were the most cautious. The Mauritians' support was largely due to the fact that open access strategies resemble their normal scientific communication practices, thus they had a practical appreciation for it (as opposed to a moral one). Namibians were keen for open access not only for the benefit they could get from it as information-seeking scholars, but because they also saw how, if their outputs were made freely accessible, other Namibians would benefit from their research. However, despite these sentiments, neither of these faculties' members went out of their way to disseminate their work in an open access fashion because they did not receive any institutional recognition for doing so.

⇨ *Finding 17. Southern African scholars who support the notion of open access communication are no more likely than their less responsive colleagues to disseminate their work in an open access fashion if they receive no institutional recognition for the effort.*

The UB administration has tried to respond to this challenge proactively by incorporating an open access ambition into its institutional repository policy and by providing financial support for the payment of scholars' article processing charges. However, other policies undercut these efforts because they do not provide any material or symbolic incentives for embracing open access practice. This ambiguity is reinforced by UB FoH scholars' own sense of ambivalence about open access due to concerns about intellectual theft and the loss of indigenous knowledge protections.

A similar lack of enthusiasm exists for many UCT Comm scholars who remain unconvinced of the merits of open access in general. Many do not buy into the arguments for open access, preferring to stick with the traditional mode of relatively "closed" communication on which they have succeeded in building their careers.

⇨ *Finding 18. Some Southern African scholars remain unconvinced by the arguments for open access dissemination, preferring to stay with the traditional mode of communication that has benefited them in the past.*

## Infrastructure and capacity

These findings have stressed the importance of motivational systems and policies because, for the most part, the universities we dealt with already possessed the technology necessary to optimise scholarly communication (or at least the resources to procure those technologies).

UB had an institutional repository, UCT had multiple subject repositories scattered across the institution and UNAM previously had an institutional repository which it was keen to revive. Only UoM lacked the kinds of technologies that one would expect to find at an institution serious about scholarly communication.

⇨ *Finding 19. Many Southern African universities already possess the technologies necessary for optimising scholarly communication.*

Perhaps because UB and UNAM had both undertaken an institutional repository installation in the past, they had relatively robust communication policies. In contrast, UCT and UoM – neither of which have institutional repositories – do not have such communications policies, a fact that negatively affects their abilities to use the technologies that they do possess. At UCT, different units, departments, centres and faculties possess websites or servers for profiling their content, but they do not abide by the same technical protocols (meaning that they are not interoperable) and they often have no relationship to each other. They're ad hoc efforts, typical in a decentralised institutional context; but they lack the benefits of contributing to a broader cohesive, strategic purpose.

### Capacity

Despite the generally solid levels of capacity at these Southern African universities, they do not enjoy consolidated expertise on new forms of scholarly communication. Such expertise exists in pockets, often in the form of "institutional champions" who are spread across the universities and do not necessarily hold any formal title or institutional mandate in this regard. One of the reasons for this is that it is difficult to identify where this activity should be located, developed and nurtured.

⇨ *Finding 20. Expertise on new forms of scholarly communication exists in pockets dispersed across universities, creating challenges in developing a coherent, integrated strategy for institutions.*

A crucial implication of this going forwards is that, because Southern African universities usually do not yet have a cohesive institutional research management system able to generate research output data and associated bibliographic detail in an efficient or appropriate format, it is difficult for them to explore various alternative metrics tools for research evaluation, thereby limiting their ability to account for their research activities in a collective fashion and to demonstrate their value to the public.

⇨ *Finding 21. Some Southern African universities' investment in traditional, Impact Factor-driven approaches to research evaluation – combined with the challenges of surfacing institutional data on both traditional and new output genres – hinders the adoption of new methodologies for assessing "impact".*

But even if these universities wanted such technologies or software management tools, they would have to approach them with great care, lest they end up accumulating a lot of expensive, sophisticated technologies that they do not have the skills or capacity to utilise. We encountered this problem on a number of occasions where technologies had been purchased or obtained through donation, but were never integrated into the institutional or policy context. They were simply inserted into a scholarly communication ecosystem without a full understanding of how they should fit into it. For new technologies to reach their full potential in these academic environments, all of the various institutional stakeholders must determine who "owns" and who "administers" such e-infrastructure, and whether the relevant staff are capable of integrating it into their workloads.

⇨ *Finding 22. The inclusion of new technologies into a scholarly communication ecosystem often requires extensive and continued retraining of support staff.*

## Research infrastructure

Lastly, Southern African universities which form part of a diverse and well-resourced national research infrastructure enjoy significant advantages over those that do not. Most Southern African universities do not enjoy such high levels of political, administrative or financial support, a fact which limits the kinds of research activity local scholars can engage and even imagine pursuing. In Botswana and Namibia, research infrastructure is only now starting to develop, while in Mauritius it is quite well-established (though the amount of money available for it remains modest).

South African universities such as UCT, on the other hand, enjoy robust governmental support in the form of the National Research Foundation, the block grant system that allows universities great discretion over their own expenditure, and the South African Post Secondary Education (SAPSE) subsidy which rewards and encourages scholarship with further funding. This enhances the opportunities that scholars have for sourcing funding both at the university and at the national governmental level.

⇨ *Finding 23. Southern African universities which form part of a diverse and well-resourced national research infrastructure enjoy significant political, administrative and financial advantages over those that do not.*

At UCT, that platform also benefits from the diversity of research groupings – in faculties, departments, units, centres and schools – that are often soft-funded, but provide a crucial extension of research capacity for the university. These groups can be called "innovation-focused intermediaries" because they are often able to ask questions that go beyond traditional disciplinary boundaries and engage with broader audiences than just other academics because of their civil society, industry and government

connections. Moreover, they can connect university academics through research translation, curation and profiling.

⇨  *Finding 24. Southern African universities would benefit from the presence of innovation-focused intermediaries that extend the value, utility and reach of academic research.*

With these findings in mind we offer, in the next chapter, our recommendations for enhancing scholarly communication in Southern Africa with strategic proposals for leaders in national governments, for university managers, for scholars themselves and for research funders.