

- Collecting the Stories -

A mid-term evaluation
for MISTRA Urban Futures (Cape Town)
Knowledge Transfer Programme

Sue Soal

- *collecting the stories* -

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Report¹

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¹ A draft of this report was shared with Zarina Patel and Amy Davison in August 2014. I am very grateful to them for their comments and input, as well as subsequent comments from Zarina, Amy and Saskia Greyling. A later draft was shared with the programme Steering Committee on 3 December 2014. This version represents the final report on the mid-term evaluation.

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1. Background

Phase 1 of the Knowledge Transfer Programme (KTP) of MISTRA Urban Futures (M-UF) in Cape Town – a collaboration between the African Centre for Cities, the City of Cape Town and MISTRA Urban Futures – is drawing to an end, and there is a need to reflect on the experience thus far to build on strengths in the design of Phase 2. The KTP seeks to “explore new sustainable urban transitions ... to make decision-making processes more legible and hence defensible within the City of Cape Town, in order to render policy outcomes of these more sustainable³.”

The KTP is structured around two programmes, the Embedded Researcher Programme and the City Official Exchange Programme. The KTP has also contributed to the M-UF Governance and Policy for Sustainability programme, the aim of which is “... to understand how sustainable urban development has been conceptualised and understood in different contexts in relation to the pressures of globalisation, inequalities, resource constraints and climate change, and to illustrate the role of knowledges in shaping different responses to the challenges of sustainable urban development.”

Whilst the depth and reach of the KTP can be measured through the numbers of publications (12 journal articles and 3 book chapters), events such as conference and workshop presentations and seminars (33), op-eds (3), news items (30) and blogs (9) produced – the experience of the KTP has revealed that these traditional measures of impact are insufficient to capture the full impact of the programme. This evaluation therefore sought to understand the impacts of the KTP in terms of the researchers involved, the partnering institutions and the shifts in policy and practice that can be attributed to this knowledge co-production partnership.

At the start of the evaluation, the main questions were -

- what, in essence, does a synthesis of our monitoring material tell us, about the programme thus far?
- what more can the whole stories – narratives – tell us about the current and potential impact of the programme?
- what can outsider perspectives (both others close to us, and the consultant) help us to see about impact and future potential?

This report offers an account of the key outcomes of the evaluation, which involved reading much of the documentation produced thus far and a set of in-depth reflective conversations with role-players, contributors and observers of the process (see Appendix A for contributors. A full report on the document review is also available).

³ These descriptions are from “CTLIP Governance and Policy for Sustainability Report: Stakeholder Analysis” by Saskia Greyling and Zarina Patel, with Anton Cartwright, Amy Davison, Rob McGaffin, Saul Roux and Anna Taylor, 5 December 2013. This report offers an in-depth account of some of the research results of the KTP.

2. The document review, questions and discussion

The first piece of evaluation work involved a review and synthesis of some of the key documents produced thus far in the programme⁴, out of which 6 key themes emerged⁵.

1. What is knowledge 'co-production' and what meaning and rank does it carry for both institutions? More specifically, is the M-UF-KTP contributing to the emergence of inquiring officials and practically grounded scholars?⁶
2. The City Official Exchange, in which city employees spend time at the university, researching and writing a paper in partnership with an academic, appears to be highly valued by its participants. To what extent is this key outcome an explicit part of the M-UF-KTP strategy?
3. Accounts of outcome and value of the officials' exchange are more available than those relating to the experiences and outcomes of the embedded researchers. Is there perhaps some work that the evaluation could do in this area?
4. Much of the monitoring material concerns the quality of process and attempts to work with a fidelity to the process principles. Could the evaluation look at outcomes in relation to themes, or content, as well as modes and tools?
5. Who are the change agents in the M-UF-KTP and what are they changing? Does the partnership - and its impact - perhaps lie here, somewhere between individual gain and institutional transformation?
6. There is interest in the City in extending the programme and their investment in it. How might this change the programme and in what ways?

In discussion out of the document review and synthesis, contributors noted the challenge in trying to 'fix' on outcomes in what is essentially a relational process, still in its early stages. Three main areas of focus emerged –

⁴ These include documentation out of the experience of embedded researchers in the City; accounts from the panel discussions; the evaluation out of round 1 of the city official's exchange programme (and round 2 forthcoming); notes out of the set-up workshop, July 2012; minutes of meetings and themes emerging from these; contributions to conferences, webs, blogs etc; reports to MISTRA Urban Futures in the period.

⁵ This was presented to and discussed with a small group of M-UF-KTP people on 17 June 2014.

⁶ Even this question generates a range of responses, including that there are different understandings of knowledge 'co-production' ranging from the experiential knowledge acquired from extended exposure to an environment (such as what the embedded researchers developed) through to traditional knowledge transfer, from one to another, and recognition of the ways in which this knowledge is changed (co-produced) in the process of transfer. Throughout the KTP, there were various working definitions of 'knowledge co-production' in use.

Change

There is a difference between seeking a model for change (implicit in the very idea of this kind of evaluation, and also in 'experimental' approaches to research) and actually *doing* change in the hands-on and rolling manner of engaged city governance. To what extent is this evaluation seeking the change that *is* happening; to what extent is it seeking to understand the process of change itself?

On this question, the very particular features of the KTP – its time, its place and the individuals associated with it - have all contributed to a very particular outcome. In that sense, there is no model coming out of this experience that can or should be advocated as a replicable template for change. At best, it might be said that 'no-model' is the model, and that any subsequent attempts to work in this way, whether in Cape Town or elsewhere, should be done with the same degree of responsiveness and paying of attention to goals, relationships and process as has been evident in this KTP.

Knowledge

Three 'kinds' of knowledge about sustainability and transitions in cities were referred to: Academic production (of PhDs, of peer-reviewed articles) is one form of knowledge. The actual outcomes of this kind of knowledge remains to be seen as further academic work emerges out of the experience in the coming months and years.

Then there is the more applied and functional production that researchers have been engaged in while at the City, for example policy briefs, policies, articles, models and methods, and the synthesising of that being done at ACC, for example in the GAPS report. Third, there is the informal, and continuous exchange of knowledge between researchers and City officials, happening in daily interactions, as well as what officials have absorbed and learnt through the exchange. This tacit, or embodied knowledge may not even exist as a written product, yet informs and is informed by daily practice⁷.

Also, on the question of knowledge, there is the question – 'What is ACC learning about knowledge and knowledge production?' This enters the terrain of knowledge not just as 'outcome' or 'product' but as process. Such an angle on knowledge presents its own opportunities for academic enquiry, technical production and even development of tacit 'knowing' – and is the stuff of much of the KTP, especially as regards the ACC's working with the outcomes of the programme.

⁷ I am grateful to Zarina Patel for pointing out the presence of this third form of tacit knowledge, present in the M-UF-KTP.

These three kinds of knowledge are all present in the KTP and each one suggests its own criteria for value. While formal academic knowledge (*episteme*) may be most valued in an academic setting, technical (*techne*) and tactical knowledge (*phronesis*) might be more valued in an institutional setting. Therefore different role-players will apportion value, and impact, to different features of the programme, depending on their point of view. (Use of these terms is drawn from "Making Organization Research Matter: Power, Values and Phronesis" Bent Flyvbjerg in The Sage Handbook of Organization Studies, 2006.)

Management

Management of these processes and relationships, and especially the institutional ones (M-UF, ACC, CoCT) is an ever-present question when reflection and evaluation rears its head and these were present from the start of the evaluation both as an opportunity for institutional learning, and also as factors that affected the programme's potential to generate change and develop knowledge.

3. Change – what difference has the M-UF-KTP made?

3.1 Embedded researchers - What difference has the M-UF-KTP made for the City?⁸

This involved four smart, skilled, insightful specialists, working seven months per year inside of the City of Cape Town, over three years, and offering altogether 84 months of intensive presence and input.

Distinct lines of interest and enquiry were followed by each researcher, features of which are briefly described below. The key phrase associated with each researcher's work is emphasised here, and used in subsequent discussion –

Saul's work focused on **energy governance**, offering perspective and analysis of national policy for the City and also developing various **applications of national policy** for the City's own approaches to governance, and for its internal policies. This work made good use of Saul's broader interest in and commitment to sustainability, his legal background his prior experience of working for the City and his interest in working as an 'engaged scholar'.

Unlike the other three researchers, all of whom were located in the Environmental Resource Management Department (ERMD), Rob was located in Spatial Planning and Urban Design. Also with experience of being a City employee, Rob's task was to support the department in the creation of **evidence based policy**, especially as it relates to 'creation of an economic platform on which planning can happen.' The Economic Areas Management Plan (**ECAMP**), co-developed with members of the department, is the most visible outcome of this work.

Anna's work, perhaps the most traditional in research-style, engaged with the Climate Adaptation Plans of Action and aimed to gain insight into the **institutional functioning** of the City as it pertains to **climate change adaptation** and its grappling with the challenge to translate policy into practice across different departments.

Anton focused on working to make the case for a better application of economic theory in Cape Town, and particularly the role of a local authority in that economy, using the toe-holds created by interest in the 'green economy' to tackle **correction of labour market failures**. His work included key involvement in the **Environmental Fiscal Reform process**. Anton's history of working with the Climate Change Think Tank as part-researcher/part-specialist within the City added to his M-UF-KTP contribution.

The effects of the embedded researchers' work – a major focus of this evaluation - is presented below in six themes. These are: presence, position, level, content, approach and aftermath.

Presence

While each of the four had specific tasks within the City, and were, to varying degrees, engaged in mainstream institutional work, they were primarily tasked to be 'researchers.' This status freed them of line management responsibilities and made their knowledge-seeking role a legitimate part of their daily work. For many contributors, their identity as researchers and

⁸ Saul Roux, Rob McGaffin, Anna Taylor and Anton Cartwright

presence is acknowledged to have contributed a questioning, conceptual and theoretically informed presence – in meetings, in the corridors, in collegial exchanges and inside of specific projects.

Contributors referred to this value as a ‘quality’, a ‘presence’ and a ‘particular angle’ that is valued precisely for its point of view and way of thinking, as much as for the specific expertise or content that might be delivered at any single point in time. Several officials noted that while they did not always have the time to read in much depth, it was greatly appreciated to have others on the team who did. This stimulating infusion of perspective contributed to supporting a questioning and theoretically informed work environment.

However, not all contributors shared this sense of comfort with the presence of researchers-as-researchers. For some, while this identity certainly added value, it was not the primary task of the researchers, and the expectation that they would contribute as officials, performing line-functions and contributing to accomplishment of the goals of their departments or units. For some this generated tension between ‘work’ and ‘research,’ while others were held less tightly to a specific deliverable task that met the needs of the City⁹.

This difference in experience begs the question of what *kind* of research was being done, and just how experiential, engaged or embedded it really was, and should be. For some contributors, the M-UF-KTP should have had ‘even more embedded-ness,’ making the whole experience *be* research, which could then be reflected on and turned into knowledge afterwards. For others, there was a need to alternate between participation and observation, and for these moments to be held more clearly and rhythmically. For others still, there was a need to be observing more, participating less. That such a small number of people could generate such a variety of expectation and opinion (from the people concerned as well as those for and with whom they worked) suggests that the M-UF-KTP certainly did its work as regards generating experience of and insight into different *modes* of knowledge transfer. How this can be worked with more explicitly and deliberately is a question for the future.

Position

The distinctive liminal status of the researchers – that they were neither staff nor consultants – was seen as especially useful, enabling them to contribute perspectives that staff members may be constrained from doing, and that consultants are unable to do as they lack both relationship with and insight into the mechanics of City functioning. However, and while creating ‘reach’ in opening thinking and alternative perspectives, this liminal status also places limitations on how far a researcher’s tangible, programmatic intervention or contribution might carry. Without a champion and structural place, qualitative interventions of tone and perspective depend heavily on the presence of the person themselves for their ongoing value in institutional life¹⁰.

⁹ This was especially so for those working on ECAMP and Energy Governance.

¹⁰ Interestingly, it is also the ECAMP and aspects of the energy governance contributions that were linked to a clear end-result and with an in-house champion, that have an identity within the City that endures even after the researcher’s departure .

Several contributors from the City noted that being an ‘academic,’ and a ‘PhD student’ also added to the credibility of the researchers. It was not just that they were in an interesting position, structurally, but also that they carried a certain intellectual weight and authority which allowed the perspectives they were advancing around the sustainability agenda to gain access and be heard in a way that others – even senior employees and consultants – might not always manage. The presence of individuals who carry this social and professional ‘rank,’ especially those with a track record on these matters and within the City, might be seen, therefore, as a valuable tactic for advancing the sustainability agenda.

Level

Much of the reflection on the different contributions of the four researchers noted how each researcher brought a different set of interests, different style and worked within different institutional contexts. This made each of the contributions unique and hard to compare. However, while recognizing the very particular circumstances of each individual, the review also seeks to identify those features of the M-UF-KTP that go beyond idiosyncrasy and coincidence.

Using the concept of ‘systemic competitiveness’¹¹, one contributor suggested that the embedded researchers were working at different levels of the City-system, there being micro, meso, macro and meta levels, with ‘meta’ being the level of norms, values and institutional culture. Even without a comprehensive analysis in these terms, this proved to be an illuminating insight.

For example, it might be said that the work on the Green economy and climate change adaptation very often targeted City identity at a meta-level, extending and challenging discourse and concepts. This work may have also played a role in securing tangible outcomes in the environmental fiscal reform process and the appointment of a person to drive climate change adaptation work in the City. However, much of the work lies at this cultural level which is typically elusive, yielding practical and visible results some time down the line, and in ways that are not necessarily directly attributable to the contribution itself.

In this sense, those working at a meta level are all too often generating perspectives that are not offered in response to a direct, expressed need, yet they contribute towards the ability of the institution to identify new needs, to see need in new ways, and to express these into the future. Certainly when driving an agenda – such as the sustainability one – change is needed at all levels of the institution, reaching beyond immediate deliverables and within terms already-given, inaccessible and hard to pinpoint as it may sometimes be.

¹¹ “An analytical concept formulated by a group of researchers (Klaus Esser, Wolfgang Hillebrand, Dirk Messner, Jörg Meyer-Stamer) at German Development Institute since the early 1990s. The main messages:

- Dynamic economic development is not only based on functioning markets and individual entrepreneurship but also on collective efforts to shape a supportive environment for business development.
- To understand the dynamics of industrial development it is crucial to analyze not only the micro- and the macro-level, i.e. markets and macro-economic framework conditions.
- We introduce two further analytical levels: The meso- and the meta-level.” (<http://www.meyer-stamer.de/systemic.html>)

Embedded researchers also worked at all other levels of the system, for example, translating macro policy into meso-level institutional policies, and also at the micro-level, notably with ECAMP delivering a very specific product in response to a very specific need. While work at these levels did emphasise tangible outcomes, it would be a simplification to acknowledge them only for this, as the way in which this work was undertaken (discussed in the sections on Presence and Position, above) undoubtedly reinforced and extended existing discourse on the topics, playing an inspiring and educational function, and extending the systems view of itself and what is possible, even while accomplishing very particular duties.

Content

Some review contributors noted that work in the more typically 'green' areas of work (climate change adaptation, green economy, and translation of the requirements of energy governance into requirements for planning and building) had a harder time finding institutional purchase than that in the more mainstream fields (evidence based planning for economic benefit and those aspects of energy governance that require less fundamental change, for example changes to in-house City functioning).

In this view, the more concrete achievements in policy-making and practice out of the M-UF-KTP are seen in light of the ideas behind them being relatively more familiar and more palatable to those in positions of influence. Seen in this way, the conditions for accomplishment of some kind of work are more amenable to such accomplishment than for work requiring acceptance of a more controversial, or less familiar, agenda.

Consideration of this perspective returns to the question of institutional culture and begs the question: "What kind of strategies and tactics are needed to drive a less familiar, more contentious agenda such as the sustainability one?" For some contributors, the answer to this question lies in working tactically, politically and in an engaged manner with the opportunities as they exist. In this perspective, change comes out of action, and through leveraging it where possible, eventually larger change at the level of culture will emerge. For others it lies in working at all levels simultaneously, striving to shift the culture, and discourse, while also working in an applied way.

Approach

Finally, a further factor influencing both the impact of the embedded researchers as well as reflections on that impact, concerns different approaches to driving and managing change.

Several contributors referred to how change in the City is an essentially 'political' process, one involving tactical reading, relating and responding, and one that is by its very nature less than ideal. Within this, different approaches to the politics of City life were shared, including using the opportunities of policy and regulation to leverage behavioural change, working relationally and building alliances around key issues and using inter-personal engagement in different ways. This same diversity of approaches is present in the ERMD in its pursuit of the sustainability agenda.

All of these different ways of 'doing' the politics of the City – by officials and by researchers - stand in contrast to frequently expressed perception of academia – and by implication, the researchers themselves – that saw their view of change as being more idealistic, more 'pure' in its expectations of how change happened and, crucially, that 'good ideas,' and 'knowledge' alone could make a difference. This view of the researchers and their 'theory of change' is not necessarily borne out in their own accounts of their thinking, but it does stand as an expression of perceived difference between officials and researchers, and raises a question as to what the expectations of embedded researchers might reasonably be.

Rather than being purely idealistic (and, in the words of some officials, 'unrealistic') it may be that the researcher approach expresses a need for greater reflection on and meaning-making out of experience than is commonly practiced in the City. Such reflection may well happen in terms of a greater ideal, or big concept, but seeing it in terms of reflection, rather than an absolute pursuit gives space for an iterative approach that combines thinking and doing; action and reflection.

While several officials acknowledged the need for greater reflection and generation of common perspective out of that, they also recognised that to achieve these conditions from inside of the City is a near impossibility. Instead, reflection occurs through opportunities located somewhat outside of the City, including 'bouncing ideas off' the embedded researchers and taking up personal-professional development opportunities. All of this does help to release some of the pressure of working life in the City. However, it does not serve to meet the need for reflection and generation of common perspective in the system as a whole¹².

Aftermath

The question of approach, leads to a strong and common question from many contributors to the review concerning whether researchers are in themselves able or expected to 'drive home' the outcomes of their interventions.

For some, for example the work on climate change adaptation and institutional functioning, this is not yet a big question as the challenges this work poses to the City have yet to be fully articulated and fed back. For others, such as ECAMP and aspects of the Energy Governance, the uptake is embedded in existing processes. However, and especially in the case of the Green Economy work, which was pursued to the point of a budget allocation having been made, there has not been further uptake or traction on this matter, potentially losing the opportunities created by the allocation, and possibly undermining the cause of the sustainability agenda into the future.

To the extent that the embedded researchers were not able to bring all of their ideas to fruition, this raises several questions. For management and drivers of processes within the City, it begs the question of what becomes of key sustainability related processes once their individual

¹² At least two of the PhD topics (Saul and Anna's) will examine this issue of City practice and its effects on the broader strategic imperative in some detail.

champions have moved on? The sustainability agenda is itself a pioneering and disruptive intervention into institutional life and City policy, thus whatever outcomes individuals are able to deliver should, ideally, be a part of a broader, coherent strategic intervention into City processes, rather than a simple reflection on the efforts of any individuals.

With this in place (ideally a strategy that resolves the debate between a ground-up vs culture-down approach to change) the 'matching' of researchers with supervisors might also become more systematic and objective-oriented. Future work with embedded researchers could ask if there was someone in the City who shared the researcher's interest and agenda – regardless of the 'level' at which it occurred, so that those who have a contribution to make at a meta-level are also matched from inside of the City by supervisors who are then able to pursue things further.

3.2 Official's exchange - What difference has the M-UF-KTP made for the City?

Two rounds of the officials' exchange have happened, with altogether 13 officials having benefited from this programme involving between six and eight weeks of time spent researching and writing a paper on an aspect of City work that engages the sustainability agenda. Eleven city officials managed to fulfill the requirements of their exchange (an academic paper, co-authored with an academic and published, or due to be published, in an accredited journal), and one has published two papers, meaning that altogether 12 papers will have been published out of this part of the exchange

Extensive evaluation of this part of the programme was undertaken in the course of implementation, revealing great perceived value from both participants and their managers. This section of the review touches briefly on additional perspectives that emerged on the officials' exchange, all of which supports the existing conclusions as to its success. These outcomes are presented as 'Individual impact,' and 'effect on the City.'

Individual impact

The impact of this experience on the individuals has been exceptionally positive with reports of increased confidence and perspective, ability to contribute to policy processes, to think more systematically and conceptually, to write better and to hold strategic intention with greater focus and assurance. The long term impact of this positive outcome on City processes is yet to be fully experienced, as officials continue to bring their new perspectives and abilities into their daily work.

Contributors noted that even in the course of two rounds of exchange, the processes of selection and supervision were strengthened, and that the status of the exchange had increased. It was anticipated that spaces on the exchange, should it continue into the future, would become increasingly competed for, and that it was definitely viewed as a 'perk' and a sign of 'recognition' for work being well-done. and where there have been a few cases of individuals not completing or complying with exchange requirements, this could be 'let go of,' in light of the overall success of the programme.

While the 'fact' of academic production was noted as being a valuable and a useful standard that stretched thinking, the view of several contributors was that the 'real' value of the

exchange lay in its creation of space for ‘reflection on experience’ and translation of this into applied concepts.

Effect on the City

This initiative is described as ‘unprecedented’ in the City’s existing staff development processes and seen as a rare and valuable space for fairly senior officials to engage in professional development in a way that is appropriate to their experience and circumstances. It also provided an unusual space in which officials from across different departments could come together in intense engagement around matters of professional concern, yet delinked from the hierarchies and pressures of ordinary institutional life. This opportunity to collaborate, and build collegiality could have valuable impact down the line as officials pursue their working lives, and pursuit of the sustainability agenda in the institution.

There is high expectation of and optimism for this model and its potential for a long-term and sustained effect on ability, capacity and morale across the City. As a result, there is a high level of commitment to continuing with it.

However, the observation of the value of the experience for individuals in its creation of a reflective space returns this review to the question raised in the section above about the City’s own capacity to work reflectively at a collective level, and the limiting effect this must have on pursuit of the sustainability agenda.

3.3 Overall - what difference has M-UF-KTP made for the City?

Overall, the M-UF-KTP, including both embedded researchers and the officials’ exchange, has contributed significantly and specifically (in the ways described above) to existing efforts in the City to populate policy and strategy with a sensibility for social, ecological and material sustainability.

Whether this impact is itself sustainable depends on the actions of those officials who have participated in the KTP – both those who have worked with the embedded researchers, and exchange participants – and overall strategising within the City for sustained impact of the sustainability agenda.

An extension of the programme, including continued official exchanges and embedded researchers¹³, will further strengthen this impact and contribution. Were the City (or those within the City who have participated in the M-UF-KTP) to manage to address the challenges to its own ability to hold and pursue the issues raised through the reflections of participants in the programme, this would strengthen things even further.

¹³ The precise form that further opportunities might take remains in question. Would the exchange happen around a single theme? How would officials be selected in the future? How senior; how junior should they be? Also, do embedded researchers need to be PhD students? Would Masters students carry the same credibility inside of the City? Perhaps post-docs? Perhaps they could be embedded for a shorter time? Even more project focused? All of these questions are rightly being asked, however, none undo the conclusion as to the fundamental value of the exchange to the City.

3.4 Embedded researchers – what difference has the M-UF-KTP made for the academy?

ACC has four PhD candidates, all of whom have an extraordinarily intimate experience of and insight into the City and its functioning. This experience and the insights that it has yielded cannot be 'undone' and must of necessity influence their PhD writing and conclusions.

Further, and regardless of whether they remain in academia or pursue careers in public service, this impact and the accompanying understanding of knowledge and knowledge production that it has generated will persist as a formative experience, affecting future practice, research and teaching for each of the embedded researchers.

The process of having embedded researchers who are also undertaking PhD research has raised challenges and questions as to how researchers with this degree of intensive experience, competing demands and sensory input might be better supported and supervised to enable them to contain and make meaning of all they have absorbed. Academic processing of an exercise that is both intellectual and experiential raises questions for the intellect and conceptions of 'research', but also the self. How best does one support and supervise such a process?.

In the course of the M-UF-KTP, there were efforts to support researchers, both individually and collectively, including through the coffee club. Yet striking a balance between supervision as a place for purely intellectual production, on the one hand, and as a place for personal venting and self-expression, on the other hand, is not easy. It may be that the group process of team sharing and reflection contains the seeds of a more systematic approach to supervision of experiential research that offers both intellectual and personal containment, however, that would need to be developed further as a 'mode' into the future.

While this impact – this challenge to more traditional notions of research - is acknowledged and living as question to a greater or lesser extent in all individuals engaged in the M-UF-KTP, it does not appear to have made a strong showing as a collective, or institutional question, and therefore its potential to impact on academic discourse and practice is not as marked as it might have been – or might still be.

3.5 Official's exchange – what difference has the M-UF-KTP made for the academy?

In addition to their positive reflection on the individuals concerned and the City-as-employer, the 12 papers that have been published (or are due to be published) by the officials in collaboration with academics are a credit to ACC. This outcome reflects well on ACC's programming ability and the support it organised in the form of writing support, training and partnership arrangements, and shows that given the right conditions, it is indeed possible to generate academic outcomes even in unconventional collaborations.

It is an open, and uncertain question as to what benefit, or difference, the KTP made to those academics contributing to it as partners in the writing process on the official exchange. While those supporting the exchange may have wished for greater impact on academic thinking and practice, including in academics beyond the ACC itself, this is not readily apparent.

3.6 Overall – what difference has the M-UF-KTP made for the academy?

Overall, there is some doubt, even skepticism, from both City-based and university contributors that the M-UF-KTP has contributed much to supporting fundamental change in the university, this despite the expressed wish of ACC to enable this. One contributor pointed out that there are no City officials being used in ACC's teaching programme, despite there being many able intellects who can contribute great perspective from reflection on experience.

Others noted that while the officials' exchange was an undoubted success, and that while there is indeed merit in supporting people to comply with academic convention, the 'exchange' intention of the KTP cannot be said to have been fulfilled in the sense that, with some notable individual exceptions – including of the embedded researchers themselves - City experience does not appear to have influenced academic practice in any significant way.

4. Knowledge – What has been produced? What is its value? How was it produced?

4.1 Different kinds of knowledge

The M-UF-KTP has worked, and generated outcomes in all three areas of knowledge referred to at the start of this report: First, there is academic production (of PhDs, of peer-reviewed articles). Second is the applied and functional production for example policy briefs, policies, articles, models and methods, and the synthesising of that being done at ACC, for example in the GAPS report.

Third, there is the informal, and continuous exchange of knowledge between researchers and City officials, happening in daily interactions, as well as what officials have absorbed and learnt through the exchange. This tacit, or embodied knowledge may not even exist as a written product, yet informs and is informed by daily practice.

While section 3, on Change also incorporates the second and third form of knowledge as contributors to change, this section addresses itself briefly to academic production, a key 'outcome' question for ACC, and less so the City (the gains for which are noted in the section above).

4.2 Academic knowledge

Here, there are the outputs and potential outputs of PhDs and papers – visible, quantifiable, rewarded, and, in the case of the M-UF-KTP, impressive in numbers as indicated at the start of this report. However, and on the other hand, the 'fact' of these outputs – acknowledged accomplishments that they are in individual, project management and institutional change terms – does not necessarily represent an *advance in scholarship* in the fields of urban policy and sustainability. How is this – the scholarship of the M-UF-KTP assessed?

In this regard, there is a possible tension between quantity and quality of traditional academic outputs, on the one hand, and the *process* of reaching these. It may well be that currently, the academic 'products' of the M-UF-KTP are not necessarily all 'earth shattering.' And it may be that less new theory has been produced, thus far, than might have been in a more conventional academic research process. But (and judging by the accounts in section 3 above), there is certainly an increase in grasp and ability in both academics and practitioners to work in an integrated way *both* conceptually and experientially (often referred to in interviews as 'ideas' and 'reality').

No doubt this enhances the abilities of all with regard to both applied/functional knowledge and tacit knowledge, strengthening the institutional environments in which such knowledge is generated, enlarged and transferred.

Further, it is an open question as to whether this experience has changed, deepened, improved or extended the *quality* of academic knowledge that will come out of the M-UF-KTP experience down the line; whether experience of an insight into the 'fine-grain' of the city institution has given sufficient epistemological access, greater than what traditional research can do, impacting on the core work of urban scholarship itself.

What impact this will have on the creation of new knowledge, and ways of expressing this, remains to be seen as the primary academic work of the project – the PhDs and ACC's other academic work out of this exercise - begin to emerge and be shared in the scholarly community into 2015 and beyond.

4.3 Processes of knowledge production

Finally, and integrally bound up with the question noted above, there is the question of whether the processes by which knowledge is produced (and the knowledge made of these processes¹⁴) - is in fact the new knowledge frontier is itself. This is a matter of lively inquiry and debate within academia, and within the ACC and those it interacts with.

The question – ‘What is ACC learning about knowledge and knowledge production?’ takes things into the terrain of knowledge not just as ‘outcome’ or ‘product’ but as process. Such an angle on knowledge presents its own opportunities for academic enquiry, technical production and even development of tacit ‘knowing’ – and is the stuff of much of the KTP, especially as regards the ACC’s working with the outcomes of the programme.

In the coming months, the M-UF-KTP will enter a phase of intensive reflection on the processes by which it has run itself, and production of material out of this. Were this inquiry and debate to become even more explicit and engaged in ACC’s institutional life, the potential impact on academic inquiry and discourse will be further enhanced, with potential to inform responses to the question of research and supervision practice raised in the section above.

4.4 Overall

Overall, in addition to acknowledging the different kinds of knowledge that the KTP has worked with and the questions that it has grappled with about the process of knowledge production, it has also contributed to the generation of scholarship in this field through the papers and articles already produced.

Furthermore, it remains to be seen in the coming year, what depth and innovation of knowledge has emerged out of the experience as further production - especially from the ACC M-UF-KTP team and the PhD students –emerges. As these products enter academic mainstream and its processes for validating and improving outcomes takes hold, so it will be fully seen what the contribution of M-UF-KTP has been to scholarship in this field.

¹⁴ Represented in M-UF-KTP through the GAPS report and further work in the coming years

5. **Management – of relationships, of intention, of the new, of expectations – how has this affected things?**

The word ‘management’ might conjure associations of simple technical action lying somewhat outside of the primary work of the M-UF-KTP. Yet the holding and facilitation of complex institutional relationships, and the various intentions, experiences and expectations of individuals within these, is a key aspect of this programme, one that touches directly on the process work that is central to its mission. It is also a task that has, with varying degrees of intensity, engaged every individual involved with the programme.

5.1 For ACC and MISTRA Urban Futures

Management has manifested strongly in the relationship between M-UF and the ACC, and this has impacted regularly and structurally on project management of the M-UF-KTP, resulting in at least two unanticipated consequences.

The first has been that the ACC has had to gear up its project management (of both the broader M-UF relationships as well as that for the M-UF-KTP), while simultaneously doing the work of the project. At times this has distracted essential and valuable intellectual resources away from scholarship and inquiry into bureaucracy and fulfillment of compliance requirements.

The challenge to ACC to retain focus on its core scholarly contribution while also developing the internal capacities to fulfill the complex requirements of contemporary north-south partnership has weighed heavily on the institution in this time.

The second consequence has been for the ACC’s relationship with the CoCT. Here, the City’s terms of engagement are quite different from ACC’s, and, when it comes to participation in the M-UF-KTP, more fluid and integrated, less itemised. For the City of CT, the M-UF-KTP is a relationship, and one opportunity to pursue a sustainability agenda in a much broader context of institutional politics and functioning, characterised by all the usual identities, emphases, agendas and discontinuities.

While the City, and the various role-players and agendas within it take opportunities as they present themselves and run with them, in this instance, ACC is bound by its contractual agreements to deliver on project outcomes. This has resulted in a perception that the City has greater freedom to innovate and adapt than does ‘the university,’ raising questions for how one contracts for collaboration with an institution like the City, while functioning within an objective-oriented contract which is not necessarily able to adapt to changing realities, even while it seeks to contribute towards that same change.

5.2 For ACC and CoCT

In addition to the structural and relational complexity given to the ACC-CoCT axis by ACC’s relationship with MISTRA Urban Futures, there are other management challenges. A key one, alluded to in preceding sections asks how to hold the simultaneous agendas of both academic research and production, and practical contribution to City functioning? Is there an approach to the City’s management of embedded researchers that is yet to be surfaced and named? And how might this be unearthed in a City context of few, if any, institutional spaces for reflection?

Furthermore, and notwithstanding the appreciation and high regard that City officials have for the M-UF-KTP exactly as it is, the M-UF-KTP might have reached even further had there been greater strategic

holding of the intent of the programme from inside of the City. This might have included a senior official championing, supervising and integrating the work of the researchers-as-researchers (not just specialists in their given fields), more access to the strategic processes of the City to support 'gearing' of those outcomes that researchers are able to achieve and greater participation in cross-institutional reflection, including provision of opportunities outside of traditional workshop spaces¹⁵.

5.3 For ACC and UCT

The way in which ACC tackles some of the challenges and questions around knowledge, knowledge production and how best to support that have been raised in the previous sections.

This question applies also to its relationships in the broader UCT environment. While ACC may itself be grappling with its view of and approach to knowledge and knowledge production, by extending the M-UF-KTP process to other players in the university (through engaging writing support and academic partners), it has also raised these challenges more broadly. How it pursues these into the future suggests even further potential for 'impact' on the academic process itself.

All of these management, or relationship challenges: ACC-M-UF, ACC-CoCT and ACC-UCT, ask, at a structural level what opportunities exist for systematic reflection, both as knowledge production and also as management 'tool'.

It might be said that the researchers expressed a reflection function on behalf of the City, and perhaps ACC is expressing a similar function on behalf of MISTRA Urban Futures (not uncommon for funded projects that are required to evaluate). Inside of ACC, and even more broadly, this reflection is happening individually. However, the burden that this places on the parts of the systems (be they organisations, departments or individuals) is simply too great, and in any event impossible to fulfill given, in the City case, the enormity and complexity of the City institution, and its unrelenting urge to forward movement and, in the case of M-UF, given its relative power and status as donor.

Yet reflection is all the more important because this is so new – and exactly what it is, is really only known when what it was, or has been, is 'seen'.

Simple one-way implementation is not an option, and pursuit of the next opportunity, without careful consideration of what has been, is not ideal. Neither is individuals contemplating in seeming isolation. How the ACC addresses this challenge and question - in its relationship to CoCT, to M-UF and to the academic process itself - may well determine the potential for the next round to take things one step further, to greater impact, beyond simple continuation of what is already a very accomplished, valued and successful initiative.

¹⁵ For example, reflective meetings between researchers, their city supervisors, academic supervisors and the M-UF-KTP lead.

5.4 Overall

Given the distinctly different identities of the three institutions involved in the M-UF-KTP, it is unsurprising that there have been challenges to the management of the processes. While MISTRA Urban Futures is working with its own institutional requirements – including complex reporting ones and the need to link the Cape Town experience to the international project, M-UF-KTP participants within the City of CT manage their own institutional discontinuities and struggles, all in a context of relentless and rapid forward movement.

While ACC is a part of the University of Cape Town and dedicated to scholarly enquiry, it is also a funded project, dependent on compliance with the rigours of project management and accountability, for its own sustained ability to continue with its work.

Working with all of these realities more explicitly from the start would undoubtedly enhance and strengthen the work of the M-UF-KTP.

6. Conclusions and thinking future potential

“So we are grasped by what we cannot grasp;
it has inner light, even from a distance-

and changes us, even if we do not reach it,
into something else ...”

Rilke

Through its conception and execution, the MISTRA Urban Futures Knowledge Transfer Programme has opened a unique and unprecedented space for interaction and exchange between the City of Cape Town and the University of Cape Town around the sustainability agenda, how best to support a city’s transitions within it, and how best to make knowledge about that. This has generated visible and readily accounted for gains in academic production, in intellectual capital and in working relationships between the institutions and within them.

Furthermore, this first ‘round’ of the M-UF-KTP has also created a ‘potential space¹⁶’ and laid the basis for a working culture between the two institutions that could well generate a recognisable practice of knowledge co-production and institutional co-operation into the future, the requirements of which are not yet fully articulated and the likes of which have not yet been fully realised.

While it is true that it is not possible, or desirable to attempt to lay down a template for how M-UF-KTP might be expanded and/or replicated, there are some lessons and insights emerging out of this review that are useful.

To be sustainable, cities of the future cannot run as they do now. What has been clearly shown in the M-UF-KTP is that for cities to be more sustainable, a transformation of their policy agendas is required, as well as an institutional transformation of the *ways* in which these policies are pursued. It is towards expansion and actualisation of this potential that this round of the M-UF-KTP has also succeeded, although the fruits of it are yet to be fully revealed. The following recommendations are made in support of such future success.

Regarding embedded researchers

- these opportunities could be shorter than the current 3 years, and remain valuable – perhaps even one year, or 18 months in two periods of ‘embedded-ness’, with a period of time at the university in-between.
- experience is what matters – at least academic or City experience; and both is ideal. This would mean keeping focused on PhD students, with the possibility of including master’s students if they have significant and valued City experience. Even post-doc placements could be valuable, depending on the circumstances.

¹⁶ Interestingly, in anatomy, a ‘potential space’ is “a space or cavity that can exist between two adjacent structures that are not tightly adjoined but usually does not open up during normal functioning.” The potential is realised through a dynamic of other physiological events (Wikipedia). This is a good metaphor for the potential that has been created by the M-UF-KTP, potential that could be expanded and realised even more impressively through further engagement.

- Supervision and contracts around purpose and objectives of the relationship are important. This requires engagement from both City and university supervisors at the start and throughout the process, looking at *how* embedded researchers are supervised, and how that process of supervision can best serve the City, the primary process of knowledge creation, and reflection of all of that towards deeper insight into the process of knowledge production itself.
- This might include consideration of the role that collective reflective experiences – such as the coffee club and the group workshop at the start of the process – played in supporting researchers through their work, and identifying the ways in which these could be more focused on generation of knowledge outcomes.

Regarding the officials' exchange

- This is an opportunity that works best for senior officials, and should be retained as such, even though there comes a point where it is difficult to secure their participation. There are other opportunities for younger and less experienced officials.
- This is also an opportunity for ACC to engage academics differently in this process in order to maximize the opportunity to intervene into the process of knowledge production itself. For example, contracting academics who are interested not only in the topics at hand, but also the processes by which they are researched may strengthen accomplishment of this programme objective. Engaging academics collectively in seminars and reflective processes that look directly at these processes could also strengthen this process.
- Continue to invest resources in thinking-writing, and in engaging officials in these experiences collectively. This input has direct benefit in nurturing 'voice' and conceptual faculties, and indirect benefit in the relationships generated amongst officials.

For ACC

- identify ways of maximizing the knowledge opportunity that this exchange has created for the ACC as a whole organisation. This includes supporting individuals to produce their PhDs and papers, and also asks that the discussions about what counts as knowledge and how best to generate it be brought to centre stage within ACC.
- Such an exploration might also affect the ways in which embedded researchers are supported in their work.
- This might involve engaging the broader academic community, as suggested above, framing this process as one of collegial engagement and enquiry into the academic process itself.

For MISTRA Urban Futures

- This process, and its multiple layers of impact and significance was made possible through the relationship between two whole institutions, not just the placement of individuals within these institutions. While the City of CT's institutional presence counts as a major asset to the KTP, ACC's ability to participate at this level of relationship rests on its institutional capacity to function as an intellectual resource, not simply as a project manager. And to do this requires significant institutional resources.
- It is suggested that M-UF's support to this programme be continued with this in mind, and that support be given to ACC as institution, enabling it to work with greater intellectual freedom and initiative in the process. This requires seeing the M-UF-KTP as one project within a broader programme of institutional capacity support.

For the City of CT

- That capacity for strategic reflection within City processes, especially those concerned with driving the sustainability agenda be actively cultivated and sought out. This is especially important when working in partnership: that the overall strategic purpose of engaging in initiatives such as the M-UF-KTP be shared and developed collectively. This would enable maximum use of such initiatives towards greater impact and success of the sustainability agenda within the broader City environment.

Contributors

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