Mary Seely, visionary scientist and dedicated teacher, turns 70

Viv Ward and Joh Henschel

Mary Seely’s name has been indelibly associated with environmental science in southern Africa for more than three decades. Her name is also synonymous with that of Gobabeb, a place in the Namib Desert which marks the beginning of her journey into the science of arid ecosystems. The year 2009 is significant for two anniversaries: Mary’s 70th birthday, and 50 years of research at Gobabeb. The story begins with an expedition of scientists in 1959, searching for a perfect site for the study of the unique insect life in the Namib. They found that Gobabeb—derived from its name in the Topnaar language, /Nomabeb, meaning the ‘place of the fig tree’—met their criteria, and it was established as a research station in 1962. Easy access to three distinct ecosystems offered great opportunities for comparative studies: the vast sand sea to the south; the stark gravel plains stretching to the north; separated by the ephemeral Kuiseb River.

Mary, an American biochemist, arrived there as a post-doctoral student in 1967 to work under the late Charles Koch, director of the Desert Ecological Research Unit. She was appointed director after his death in 1970—a young woman having such a leading position in that time and place was, to say the least, both controversial and challenging. Undeterred, Mary led Gobabeb to become an international focal point for desert research, attracting visiting scientists from countries worldwide. She developed a prolific research platform at Gobabeb which included several post-doctoral positions, while also drawing on the cooperation of many scientists based elsewhere.

The year 2009 is significant of her journey into the science of arid Namib ecology, physiology, geology, geomorphology, archaeology and sociology. What, during this first phase of Mary’s career, were the keys to her success? It is clear that a convergence of fate, fortune and Mary’s own special brand of energy, focus and self-motivation, all worked in her favour. The locality and research function of Gobabeb provided the perfect springboard to her career, together with the support of several colleagues and friends who helped to open doors, which she had no hesitation in entering! Much of the success of the Gobabeb research programme related to Mary’s commitment to facilitating other people’s research and becoming directly involved with research projects that were out of her own field, but that added to understanding of the Namib ecology. Gobabeb became a place where all were welcome. She has always worked tirelessly and without complaint, immersing herself fearlessly in the big issues, ever seeking out (and implementing) ways to do things better. She will be heard saying, ‘Make use of what you have, then build on it.’ She demonstrated this from the beginning, making minimal funds go a long way, while doggedly building up an increasingly viable and professional institution. An empathic human being, she is quick to offer a helping hand whether on a personal level, or to facilitate study and career opportunities for her protégés. ‘Out of the box’ thinking is Mary’s challenge to all, be they aspiring scientists, peers and colleagues, or young people who are ‘finding themselves in the desert’. Her favourite (and famous) comment on reviewing first drafts of publications is ‘So what?, forcing the author to go back and find the ‘gee whiz’ aspects of the subject, and cut the waffle.

Mary’s characteristic focus on her goals, and her perseverance in meeting them against all odds, paid off at the time of Namibia’s independence in 1990. The second phase of her career began at this time, with a crisis: South African funding which had underpinned Gobabeb was withdrawn, and closure was imminent. But Mary saw beyond Gobabeb, to the potential for applying science in the development arena. Her establishment of the Desert Research Foundation of Namibia (DRFN) opened a gateway in Namibia that served to connect science to development, translating desert knowledge into policy, training and capacity, awareness and sustainable development.

Mary’s work pioneered desertification and land degradation interventions, action-based as well as published. As the driving force behind Namibia’s Programme to Combat Desertification (Napcod), her efforts have linked a range of United Nations conventions, government departments, the NGO sector and communities. So effective is this approach that most Namibian land degradation programmes are based on Napcod principles.

By now in 2009, Mary’s 70th year, she is recognised widely for her contributions both as an academic and as an applied scientist: she has been awarded three honorary professorships, a fellowship and several D.Sc. and medal awards, and most recently has been appointed as land degradation advisor to the scientific and technical advisory panel of the Global Environmental Facility. She is author or co-author of more than 130 peer-reviewed publications, ten books, and numerous environmental reports, conference proceedings and popular articles. Through her research, publications and supervision (some 60 Masters and Ph.D. candidates), she has inspired several generations of scientists. Mary’s commitment to training and education is evidenced by the many students participating in the programmes she has established, who now excel in natural and social science fields. She is regarded as a mentor by many leading or upcoming scientists in the region.

Although Mary retired in 2006 from her role as director, she continues to work as an independent scientist based at Gobabeb. Mary’s characteristic energy, focus and persistence in driving forward science and training, while maintaining her personable approach and empathy for people and projects, has left a lasting legacy at Gobabeb and beyond.
position as director of DRFN, she has since focused her efforts on the union between the Namibian Nature Foundation and DRFN. The emergent Namibia Institute for Sustainable Development is a greatly strengthened NGO, which promises to effectively leapfrog many environmental hurdles. It will no doubt also offer Mary a challenging third phase in her career! Never neglecting her desert roots, she continues her full involvement as active Gobabeb associate and member of the board of trustees. Her advice on environmental matters is called upon by numerous influential people from institutions and governments in Africa and worldwide. She certainly lives up to the adage, ‘if you need something done, give it to a busy person’; she is well known for her unconditional willingness to help or advise friends and colleagues, to initiate and participate in programmes, however busy she may be. When asked what motivates her incredible drive and commitment, she replies, ‘Because I believe in the potential waiting to unfold, potential in the human resources that will ensure equity, efficiency and environmental sustainability’.

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‘Knowledge in the Blood?’: Race, Consciousness and Understanding in South African Higher Education


Jonathan Jansen’s Knowledge in the Blood is one of the most important books on higher education to have come out of South Africa in recent times. It has been widely reviewed in the South African press and has, on the one hand, evoked fascination, admiration and respect, but on the other, ridicule and condemnation. Much of the latter is written in criticism of Jansen’s initiatives around the notorious ‘Reitz Four’, the young men at the University of the Free State who made a video in which they are seen to humiliate five workers in their university residence. One reviewer even describes the book as a ‘tear-jerker’ (Clare Jackson, ‘Tear-jerking Jansen’ in Mail and Guardian, Friday October 30 to November 5, 2009, p. 21).

That Knowledge in the Blood has elicited the strong responses it has is hardly surprising. South Africa, Desmond Tutu’s ‘rainbow nation’, stands at a pivotal point in her history. Has the country been able to transcend its heritage of intolerance and inequality? What are we to make of an apparent resurgence of suspicion amongst people of different background? Where are our young people going, at least in their heads? The book attempts to speak to this complexity, and South Africans are looking to it to help them think their way through it. For the purposes of a review, the question has to be asked whether the book manages to do what people seek from it? Does it speak to this complexity?

It certainly does so, and in ways which are both courageous and innovative. It is this very combination of courage and innovation which makes the work methodologically a challenging enterprise: Jansen is seeking to take his own personal experience and to use it as the empirical substrate upon which to develop a theory of pedagogy for conditions of conflict such as our own. The work is, in these terms, simultaneously a memoir, a political analysis and also a scholarly text. Jansen is able to traverse all of these terrains, having honed his craft as a scholar of curriculum theory over two decades; having worked as a journalist; and most recently having operated in the public domain, where his own life story has served as the backdrop against which he has sought to engage South Africans of different backgrounds in the process of finding their common humanity. But, as he discovers in writing this book, holding all of these together at the same level of intensity in a single text is intellectually difficult.

This difficulty notwithstanding, Knowledge in the Blood is important for several reasons: it is a partial biography of an extraordinary South African; it tells the story of the contemporary encounter between South Africans of different experiences and histories; it engages with the challenge of learning in environments of social conflict; and, most critically, it seeks to make sense of the intensely puzzling phenomenon of the university as a site of human bigotry.

Knowledge in the Blood uses Jansen’s experience as the first black dean of education at the University of Pretoria to describe his experiences of working in an historically Afrikaans-speaking university. The text itself is framed around his experience of entering the University of Pretoria and his first encounters with its liberal rector, Johan van Zyl, and its profoundly complex institutional climate, characterised by deference to authority. The text uses this framing to describe the contradictions that he encounters daily— incredible civility and an apparent sense of humaneness in one context; and its very opposite, inexplicable incivility and inhumanity, in the next. He begins the book by telling the story of his arrival at Tiekies (the University of Pretoria); his committee-work and the role he was called upon to play in supporting the path opened up by the rector; his meetings with parents of young Afrikaans-speaking men and women who come to assure themselves that this new black dean will pass muster; his decision to make sense of the psychology of the Afrikaans white community and his consequent immersion in its world of patriarchy, faith and conservatism.

As a story-teller Jansen is powerful. The book is rich in the carefully narrated description of his weekly meetings with his students, black and white. It tells of his work in leading the make-over of his faculty and particularly that of bringing in new sophisticated young black scholars who present a view of people of colour that his older white colleagues are not only surprised by, but which actually intimidates them. He contextualises this story through an analysis of the sense of loss of control which white academics feel: ‘but the empirical status of transition is not what impresses whites. It is the psychological state of being defeated that clouds any interpretation of what is happening in the country’ (p. 29).

How do the ‘defeated’ then bring their children up? It is one of the central objectives of the book to explain this process. Jansen looks to the literature of the Holocaust to help him explain how environments of perpetrators’ and victims’ work as pedagogical spaces. In this he comes to look at intergenerational relationships, the role of the family, the church, sport and schools and so on. It is here that the paradox of ‘knowledge in the blood’ surfaces. Working his way through many theories and explanations he arrives at a crucial point in his analysis to argue that ‘some knowledges are imbued with determining attributes of which individuals may not consciously be aware’ (p. 181).

It is here, in his disquisition about knowledge, I want to argue, that the book demonstrates its most critical significance. For many in South Africa the book will provide a rich repertoire of stories of