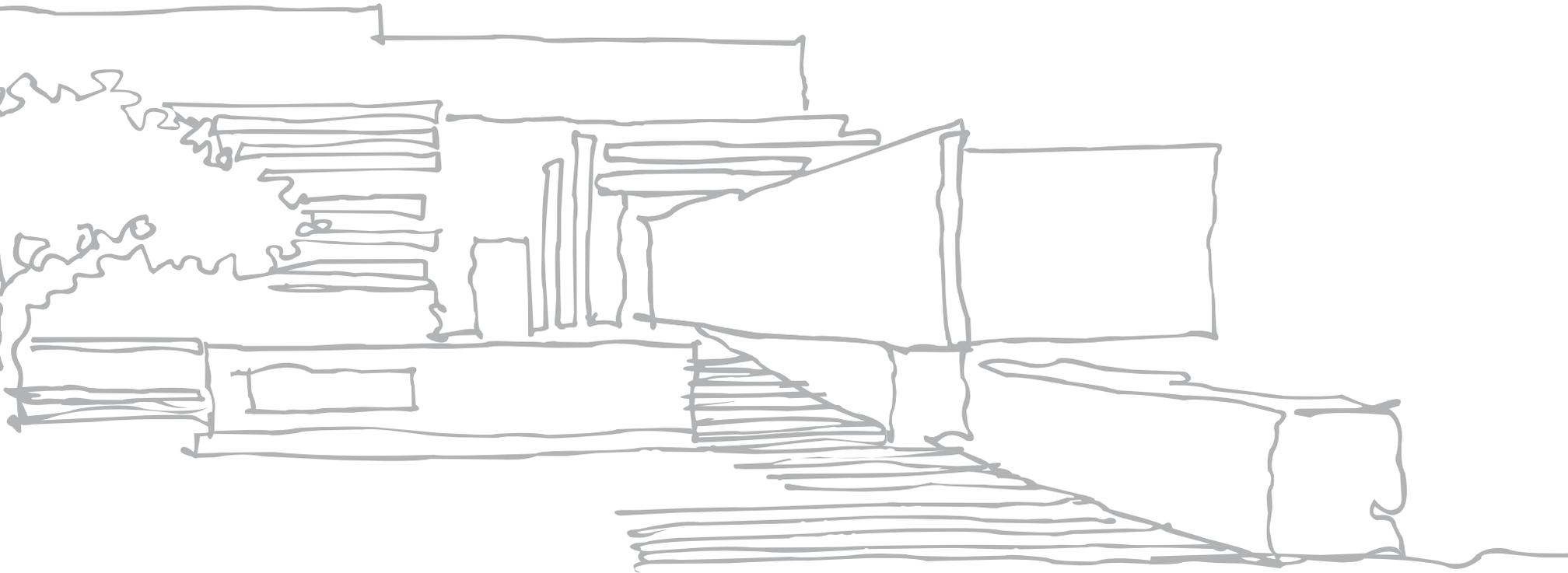


STIAS ANNUAL REPORT 2015



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STELLENBOSCH INSTITUTE FOR ADVANCED STUDY
STELLENBOSSE INSTITUUT VIR GEVORDERDE NAVORSING

VISIONARY

'IN ORDER FOR US ALL TO BE PART OF TOMORROW'S DISCOVERIES AND BREAKTHROUGHS, WE MUST INVEST TODAY IN THE DEVELOPMENT OF OUR BRIGHTEST MINDS. STIAS IS MEANT TO BE A BEACON OF HOPE IN THIS REGARD. DESPITE THE CHALLENGES AFRICA IS FACING, IT HAS GREAT POTENTIAL TO DEAL WITH THESE AND FIND ENDURING SOLUTIONS. THE GRANT OF THE FOUNDATION FOR STIAS IS NOT ONLY AN EXPRESSION OF OUR BELIEF IN THIS POTENTIAL, BUT IS ALSO GIVEN IN THE HOPE THAT OTHERS WILL SUPPORT THIS INITIATIVE. WE HAVE AN OBLIGATION TO ENSURE THAT THE SEARCH FOR NEW KNOWLEDGE CONTINUES AND THAT AFRICA PLAYS ITS RIGHTFUL ROLE IN THIS REGARD'

— Dr Peter Wallenberg (1926-2015)



DR PETER WALLENBERG (1926-2015) _____

BENEFACTOR AND FRIEND

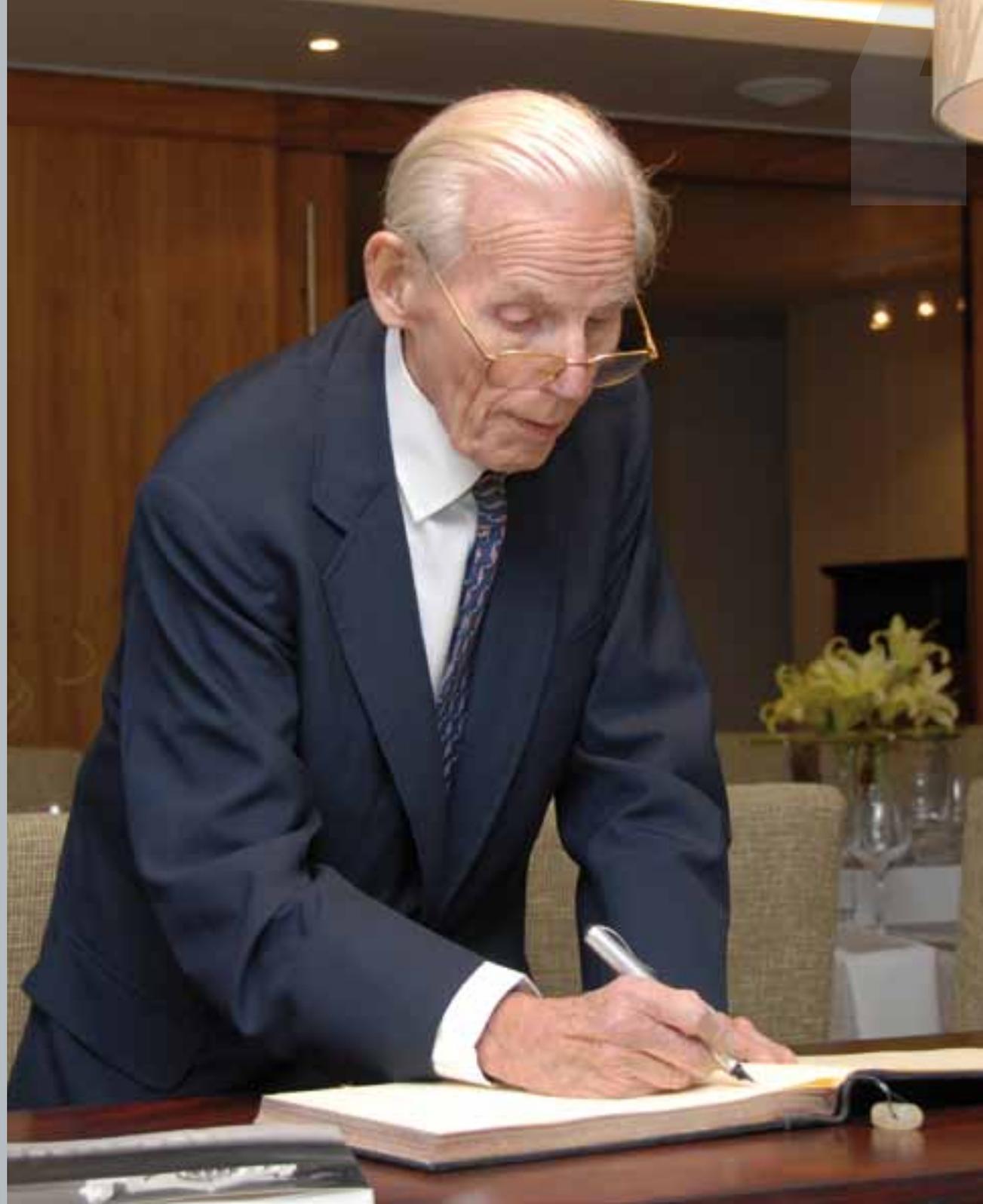
Tribute to Peter Wallenberg

STIAS lost one of its most loyal and greatest benefactors in the course of 2015 with the death of Dr Peter Wallenberg (88). More than anybody else, he identified with the dream of STIAS and more than anybody he provided the material means to make this dream a reality. The Wallenberg Research Centre at Mostertsdrift will remain a living monument in his honour and the numerous STIAS fellows supported during the past decade will remember him with deep gratitude.

A giant of Swedish industry and a leader in the international business scene, Peter Wallenberg had an enduring love for Africa and an intimate relationship with STIAS. He often visited the Institute and became its greatest benefactor. In 2007 Stellenbosch University awarded him an honorary doctorate. With generous grants from several of the Wallenberg Foundations, he funded the building of the Wallenberg Research Centre at STIAS and supported the research programme of the Institute since 2008.

In the light of his exceptional leadership characteristics, his excellent achievements as a banker and industrialist, his interest in and support of training and research, his association with Africa, his close ties with South Africa and in particular with Stellenbosch, it is only appropriate that Stellenbosch University honours him with an honorary doctorate.

(From the commendation for Dr Wallenberg)



“We will remember him as someone who backed up his faith in humanity with the kind of tangible action required to turn potential into reality. He was regarded internationally as one of the leading industrialists of our time, yet we knew him as a modest and humble person.”

— Leopoldt van Huyssteen
Acting Rector and Vice-Chancellor
Stellenbosch University

“More than anybody else Dr Wallenberg identified with the dream of STIAS and more than anybody he provided the material means to make this dream a reality. We will remember him with deep gratitude.”

— STIAS Director Hendrik Geyer

Peter Wallenberg was born on 29 May 1926 in Stockholm. After obtaining a law degree from the University of Stockholm and qualifying as a naval officer, he started his career in 1953 at Atlas Copco, a company of the Wallenberg group. He represented the company in the USA and thereafter in the former Rhodesia and the Belgian Congo, where his lifelong association with and love for Africa began. He is the only member of the Wallenberg family who has worked in Africa. After a further term in London he was promoted to managing director of the mining and construction divisions of Atlas in 1970.

The turning point in his life came in 1971 with the unexpected death of his older brother Marcus. Peter had to step in and take over the responsibility of the Wallenberg interests. At that stage the Wallenbergs were already one of the leading banking and industrial groups in Sweden and in Europe.

The foundation was laid by Marcus Wallenberg's grandfather, André Oskar Wallenberg, who in 1856 established the first private bank in Sweden, the Stockholms Enskilda Bank (SEB). The bank's main focus was the financing of companies and it soon had the largest Swedish industrialists among its clients. As a family bank, SEB placed emphasis on long-term relationships and built the reputation of not deserting its clients in difficult times. In many cases the bank took over shares in struggling companies, rather than have them go under. In this way, the Wallenberg family built an extensive industrial empire alongside their banking activities, at first through interests in Swedish but soon also international companies. This empire was placed under the control of the Wallenberg's umbrella company, Investor. In time, shares (and often also control) were obtained in numerous companies through Investor. Such companies included Ericsson, Electrolux, Stora Enso, Europe's largest pulp and paper group, Asea (energy), SAS (the Scandinavian airline), SKF, AstraZeneca (a pharmaceutical company), ABB (a Swedish-Swiss engineering group), Saab and Scania.

Despite initial scepticism Peter Wallenberg became the most successful leader in the group's history. Unobtrusively, he familiarised himself thoroughly with every aspect of the wide-flung and complex group of companies. After becoming chairman of Investor, he restructured the group and implemented far-reaching reforms to make the holding company more effective and profitable. He followed his father's policy of continuously scouting for new management talent for the companies in the group and of searching for new investment opportunities. He was particularly interested in long-term partnerships that benefited both parties and continued the Wallenberg tradition of support even in difficult times. At the time of his retirement, companies of the Investor group had reached new heights. The financial journalist Robert Guttman wrote the following about the group:

“Mr Peter Wallenberg, doyen of its fourth generation, has extended its dominance of Swedish industry to unprecedented levels and entrenched the family as Europe's most powerful industrial dynasty. The core companies in the Wallenberg 'sphere' together make up about 40 percent of the market capitalisation of the Stockholm stock exchange.”

Peter Wallenberg was a living example of the motto of the Wallenberg family: *'esse non vidare'* (to be, not to be seen). He never sought public attention and chose to work behind the scenes. He regarded the integrity and credibility of the Wallenberg name as their greatest asset that should never be compromised. Even though the assets of the group and its shareholders increased greatly during his term as chairman of Investor, he never used his position for personal enrichment. In addition, he considered it an important principle that the

Swedish trade and industry in general should benefit from the initiatives undertaken by his group. He also endeavoured to build an international network of personal relationships with business and political leaders. His high esteem in these circles is evident from the fact that he was the honorary president of the International Chamber of Commerce and member of the European Advisory Patron Board.

Peter Wallenberg had an enduring interest in education and research, and was responsible for donations to several educational institutions, among others the Wallenberg Hall at Stanford University, the Raoul Wallenberg guest house at the Collegium Budapest (in honour of a member of the family who, as a Swedish diplomat in Budapest in the Second World War, saved the lives of several Hungarian Jews) and the Stellenbosch Institute for Advanced Study.

He received numerous honorary doctorates, among others from the Royal Institute of Technology in Stockholm, Georgetown University, the Institute National Polytechnique de Lorraine, Uppsala University – and Stellenbosch University in 2007. He has also been honoured with decorations from countries across the world, including among others The King's Medal from Sweden; Commander, First Class, of the Royal Norwegian Order of Merit; the Grand-Croix de l'Ordre du Lion from Finland; the Grand Cross from Portugal; the Grand Cross of the Order of Gregorius the Great of the Holy See; the Grosse Bundesverdienstkreuz from Germany; the Order of the Cruzeiro do Sul from Brazil; the Order of Isabel la Católica from Spain; Honorary Knight Commander of the Most Excellent Order of the British Empire from the United Kingdom; the Ordine al Merito from Italy; the Ordre de Leopold from Belgium; the Ordre National de la Légion d'Honneur from France; and the Three Stars Order from Latvia.

STIAS honours his memory and looks forward to continuing its relationship with the Wallenberg family when the two brothers Jacob and Peter Jnr, sons of Peter Snr, and their cousins Caroline Ankarcrona and Marcus Wallenberg visit STIAS in February 2016.



WALLEN
research centre · nav



CONTENTS

| | |
|----|----------------------------------|
| | Tribute to Peter Wallenberg |
| 06 | Chairman's foreword |
| 07 | Director's message |
| 08 | 2015 at a glance |
| 10 | STIAS longer-term theme projects |
| 16 | STIAS fellows and projects |
| 19 | STIAS-Wallenberg Round Table |
| 20 | Selected project profiles |
| 46 | STIAS fellows and projects list |
| 48 | STIAS lecture series |
| 49 | STIAS seminars |
| 51 | STIAS publications |
| 54 | Funding and governance |
| 55 | Financial report |
| 56 | Director and staff |
| 57 | Facilities |
| 57 | Acknowledgements |
| | Contact details |
| | Company information |

CHAIRMAN'S FOREWORD



Events at STIAS were overshadowed in early 2015 by the news that Dr Peter Wallenberg, the great benefactor and staunch supporter of STIAS, passed away peacefully at his home on the morning of 19 January 2015. More than anybody else he identified with the dream of STIAS and more than anybody he provided the material means to make this dream a reality. The Wallenberg Research Centre at Mostertsdrift will remain a living monument in his honour and the numerous STIAS fellows supported during the past decade will remember him with deep gratitude.

It is fitting to recall here his vision for STIAS, expressed at the launch of the Wallenberg Research Centre in November 2007: "In order for us all to be part of tomorrow's discoveries and breakthroughs, we must invest today in the development

of our brightest minds. STIAS is meant to be a beacon of hope in this regard. Despite the challenges Africa is facing, it has great potential to deal with these and find enduring solutions. The grant of the Foundation for STIAS is not only an expression of our belief in this potential, but is also given in the hope that others will support this initiative. We have an obligation to ensure that the search for new knowledge continues and that Africa plays its rightful role in this regard."

This vision remains with us as a lodestar for the future of STIAS.

STIAS can look back over an eventful and successful year. In addition to further consolidating its academic programme the following new STIAS initiatives were developed during 2015:

- An agreement was reached with the Volkswagen Foundation (VF) within its 'Knowledge for tomorrow – cooperative research projects in sub-Saharan Africa' funding initiative. All current postdoctoral fellows of the VF are now eligible for a 'fellowship module' at STIAS. The STIAS postdoctoral fellowship module will enable recipients of a VF postdoctoral fellowship to spend up to five months of their fellowship at STIAS. This programme is fully funded by the VF.
- Following extensive discussions of its proposed *Iso Lomso* programme at the Board of Directors and Academic Advisory Board meetings in March, STIAS embarked on a pilot phase of this programme. Two young academics from Stellenbosch University will spend the first semester of 2016 as invited STIAS fellows, and the second semester at respectively the National Humanities Center in North Carolina and the Harvard Radcliffe Institute for Advanced Study (IAS). This follows successful negotiation with the respective directors of these two institutes who have also made commitments to similar future arrangements. STIAS is preparing a general call for application to the *Iso Lomso* programme for 2017 and will endeavour to make similar arrangements with other IASs.

Sincere gratitude is due to our supporters and benefactors. STIAS could once again draw on the very generous support of a number of long-term key role players and contributors:

- The Marianne and Marcus Wallenberg Foundation has continued to fund the core STIAS fellowship programme as well as a number of other initiatives including the annual STIAS-Wallenberg Round Table meetings. Funds are also

provided for a number of Swedish experts to help develop the STIAS programme.

- The Knut and Alice Wallenberg Foundation (KAWF) awarded a five-year grant to STIAS commencing in 2013. This grant was awarded to STIAS for its longer-term theme projects and will be considered for renewal for a further five years after review.
- The Council of Stellenbosch University provided funds matching the KAWF grant via the STIAS Trust (commencing in 2014).
- Significant funding was also received from the Swedish Riksbankens Jubileumsfond for a period of five years.
- Generous grants were once again made available by the Donald Gordon Foundation and the Trellis Charitable Trust.

Due to the above benefactors and the dedicated individuals and teams working for and within STIAS, STIAS was able to make further strides in achieving its objectives, namely to advance the cause of science and scholarship, to invest in the intellectual future of South Africa, to focus on the African continent and to provide an independent space where innovative ideas and original thinking can thrive.

To all those who have contributed to the success of STIAS – STIAS fellows; Stellenbosch University management; many Swedish experts; members of the STIAS Board of Directors, Academic Advisory Board and Fellowship and Programme Committee; STIAS employees, in particular the Director of STIAS; my heartfelt thanks for your continued support and dedication.

A handwritten signature in dark ink, appearing to read "Desmond Smith". The signature is fluid and cursive, written on a light-colored background.

Desmond Smith
Chairman of the Board

DIRECTOR'S MESSAGE



The STIAS programme has entered a mature phase, having embarked on the current format in 2009. It continues to reflect an emphasis on projects which draw on an interdisciplinary basis, are considered relevant to the (South) African context, and often address topical issues of the day. An increasing component represents activities within the seven longer-term theme projects.

STIAS has made significant progress with a core objective – to become a household address for Africa's top academics. In this respect invaluable contact was established with Berhanu Abegaz, Executive Director of the African Academy of Sciences (AAS), and STIAS fellow in 2014 and 2015. Joint AAS-STIAS initiatives, especially linked to the STIAS *Health in transition* theme project, are now envisaged for 2016. Overlapping periods of residence of five fellows from the African continent afforded an ideal opportunity to explore future projects and to strengthen links.

STIAS's activities and visibility continue to grow: 75 fellows and nine visiting scholars participated in the 2015 programme, with 50 seminars presented in the fellows' seminar series and six public STIAS lectures on the campus of Stellenbosch University. Fellows and visiting scholars also presented and participated in numerous colloquia and lectures at universities around South Africa.

Twenty books and eight chapters in books were published in 2015 as a result of work carried out at STIAS. Forty-nine journal articles appeared with the STIAS affiliation, amongst them three in the top-ranking *Proceedings of the National Academy of Sciences of the United States of America*. Web of Science indicates 175 citations for STIAS papers published in 2014 and 2015 with an h-index of 7.

Our longer-term theme projects – *Being human today*, *Crossing borders*, *The future of democracy*, *Understanding complexity*, *Sustainable agro-ecosystems*, and *Health in transition* – are at various stages of development and will continue over the next two to three years. The objective to organise each (sub-) theme around core groups of fellows has only been partially achieved, although at least one strong core group has now been established in each theme. It has increasingly become clear that despite limited resources to do so, workshops will have to be considered an integral part of planning the longer-term theme project activities, where it remains a major challenge to convene groups at STIAS for simultaneous periods of residence of a month and longer, especially so over the course of several years. In 2015 STIAS organised and hosted six such workshops.

Over the past year 50 direct applications to the STIAS programme were received, 30 of which were evaluated as suitable for the STIAS programme, and of sufficiently high standard to be accepted.

A number of STIAS fellows received significant international recognition for their work:

- South African author Ivan Vladislavić, artist-in-residence at STIAS in 2012/2013, was awarded one of three Yale University 2015 Windham-Campbell Prizes for fiction, “to call attention to literary achievement and provide writers with the opportunity to focus on their work independent of financial concerns”.
- Vincent Brümmer received the 2015 Andrew Murray Prize for theology publications in Afrikaans for his book *Vroom of*

regsinnig? Teologie in die NG Kerk (Piety versus orthodoxy? Theology in the Dutch Reformed Church) in which he explores mystical theology, and confessionalism in the Dutch Reformed Church.

- The International Plant Protection Award of Distinction was presented to Richard Sikora at the International Plant Protection Congress in Berlin during August 2015 for his impressive record of research and teaching in the field of plant protection in the tropics and soil health.
- Jill Farrant was named the 2015 EPFL WISH Foundation Erna Hamburger Laureate for excellence in phytology for being a role model to biologists worldwide. She presented her work as a TED talk and was showcased in the BBC world series *The Genius Behind*.

In September 2015 STIAS welcomed Christoff Pauw as STIAS Programme Manager. He will, in particular, focus on expanding STIAS's links and visibility in Africa. We look forward to the implementation in 2016 of the STIAS *Iso Lomso* programme, an early career support programme which will boost the careers of some of the brightest young minds in African academia. The backbone of support for these young researchers will be periods of residence over three years at STIAS to focus on their research programmes and opportunities to pursue similar research at one of STIAS's sister institutes.

One of the 2015 STIAS fellows reported that “I have found STIAS a place where 'looking over the fence' of one's own discipline has become a scientific lifestyle. Without the customary exaggeration in such assessments I can say that it has been the most valuable and creative experience in my life history. I cannot think of a better format than what I have seen, heard and experienced at STIAS.”

May this continue to characterise life and work at STIAS.

Hendrik Geyer
Director of STIAS

2015 AT A GLANCE

Seventy-five fellows and nine visiting scholars participated in the 2015 programme for a total of 146 fellowship months. Fifty seminars were presented in the fellows' seminar series and six public STIAS lectures were given on the campus of Stellenbosch University.

Twenty books, eight chapters in books and 49 journal articles were published in 2015 as a result of work carried out at STIAS.

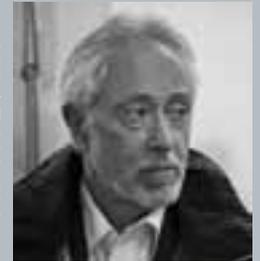
Fifty applications to the STIAS programme were received in 2015 via the direct application route of which 30 were successful.

FEBRUARY



Ivan Vladislavić, STIAS artist-in-residence in 2012/2013, is awarded Yale University's 2015 Windham-Campbell Prize for fiction.

APRIL / MAY



JM Coetzee, Nobel Laureate for Literature in 2003, is a fellow at STIAS.

JANUARY



Peter Wallenberg, great benefactor and staunch supporter of STIAS, dies at his home in Sweden. "We are saddened by the loss of a great visionary and a personal friend", says Bernard Lategan, founding Director of STIAS.

FEBRUARY



STIAS hosts the third STIAS-Wallenberg Round Table on *Strategic directions for agricultural transformation in southern Africa*. From left: Janos Bogardi, Lukas Gakale, Richard Sikora and Eugene Terry

APRIL

STIAS embarks on a pilot phase of the *Iso Lomso* ('the eye of tomorrow') programme and two young academics, Grace Musila and Scarlet Cornelissen, are selected to spend the first semester of 2016 as STIAS fellows, and the second semester respectively at the National Humanities Center in North Carolina and the Harvard Radcliffe Institute for Advanced Study.

APRIL

Vincent Brümmer, STIAS fellow in 2011 and 2012 wins the 2015 Andrew Murray Prize for theology publications in Afrikaans for his book written at STIAS *Vroom of Regsinig? Teologie in die NG Kerk* (Piety versus Orthodoxy? Theology in the Dutch Reformed Church).



MAY

The Volkswagen Foundation of Germany agrees to support a postdoctoral fellowship module at STIAS within its "Knowledge for tomorrow – cooperative research projects in sub-Saharan Africa". Current postdoctoral fellows of the Volkswagen Foundation will be eligible to apply for this module.



SEPTEMBER

The Third Stellenbosch Annual Seminar on Constitutionalism in Africa with the theme *Constitutional adjudication in Africa* is held at STIAS.

SEPTEMBER

Athol Fugard gives a seminar at STIAS in which he reflects on 60 years as a writer and playwright: "At the heart of it all is a face and a human story, never an idea. I only put words to paper if I have a story to tell", explains Fugard.

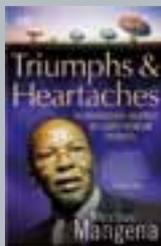


AUGUST

The International Plant Protection Award of Distinction is presented to Richard Sikora at the International Plant Protection Congress in Berlin for his impressive record of research and teaching in the field of plant protection in the tropics and soil health.

SEPTEMBER

The book *Triumphs and heartaches* by Mosibudi Mangena, STIAS fellow in 2013, is launched at STIAS. "We have to educate – education is the great leveller – educating more people will mean we can tackle the issues of poverty and development", says Mangena.



From left: Hendrik Geyer, Mosibudi Mangena, Marlene van Niekerk, Peter Vale and Morné du Plessis



NOVEMBER/DECEMBER



The Third Peter Wall Colloquium Abroad at STIAS on arts and social transformation is held at STIAS from 30 November to 4 December. It is attended by scholars and practitioners exploring social transformation through the arts via multiple arts-based modalities. From left: back row – Kim Berman, Ariella Friedman, Theogene Niwenshuti, Carrie MacLeod, Rena Sharon, Adriaan Brand; front – Cynthia Cohen, Frank Meintjies, Janis Sarra, Patty Abozaglo, Michelle LeBaron, Ashli Akins, Peter Reiner

STIAS LONGER-TERM THEME PROJECTS

“How can arts interventions create a robust link between grassroots initiatives and systemic issues? Is it possible to creatively engage with policy-makers and community leaders at the same time?”

– Participant, Being Human Today Colloquium 2015

A photograph of two women sitting at a table in what appears to be a meeting or colloquium. The woman in the foreground is wearing a blue headwrap and a patterned top, looking towards the left with an open mouth as if speaking or reacting. The woman behind her is wearing glasses and a black top, also looking towards the left. There are papers and a laptop on the table in front of them.

BEING

The seven longer-term theme projects *Being human today*, *Crossing borders*, *The future of democracy*, *Understanding complexity*, *Sustainable agro-ecosystems* and *Health in transition* divided into *Health prevention* and *Health care* supported since 2013 and funded by the Knut and Alice Wallenberg Foundation are projected to continue over the next two to three years.

The theme projects were conceived around core groups of fellows for each (sub-) theme. This has been partially achieved and at least one strong core group has been established for a number of sub-themes. Numerous individual applications and proposals which have been positioned within the ambit of the respective concept notes have been received and a number of them have been accepted (and completed) as detailed below. STIAS organised and hosted a number of workshops related to its programme in 2015, the majority linked to the longer-term theme projects. It has increasingly become clear that despite limited resources to do so, workshops will have to be considered as an integral part of planning the longer-term theme project activities, where it remains a major challenge to convene groups at STIAS for simultaneous periods of residence of a month and longer, especially so over the course of several years.

Being human today

Effects of race

Nina Jablonski and Gerhard Maré have co-convened *The effects of race* sub-theme and they and a group of eight fellows (Norman Duncan, Mikael Hjerm, Aryan Kaganof, Chabani Manganyi, Njabulo Ndebele, Barney Pityana, Crain Soudien and Göran Therborn) as well as visiting scholar Zimitri

The effects of race group
Front from left: Goran Therborn, Gerhard Maré, Barney Pityana, Crain Soudien, Njabulo Ndebele, Mikael Hjerm and Chabani Manganyi
Back: Nina Jablonski, Aryan Kaganof and Zimitri Erasmus



Erasmus met for the second time at STIAS in July/August. They will re-convene in 2016 when a volume of essays will be finalised for publication in the STIAS series. A number of projects at other institutions which commenced in 2014 (including the Cape Peninsula University of Technology, Durban University of Technology, Stellenbosch University, University of the Western Cape and the University of KwaZulu-Natal) that resulted from this initiative are continuing.

How did *Homo sapiens* become *Homo docens*?

The group of five (Rudie Botha, Peter Gärdenfors, Anders Högberg, Lars Larsson, and Marilize Lombard) led by Gärdenfors were in residence for six weeks in 2015. They will re-convene in late 2016. During 2015 the group published five papers, two of which in the *Cambridge Archaeological Journal*.

It's the education, stupid! Martin Luther's unfinished business

Demographers Reiner Klingholz and Wolfgang Lutz followed up Klingholz's earlier project (*How to survive the post-growth century*; 2014 book publication *Sklaven des Wachstums*) with a book project which uses existing studies on the impact of education to describe the different possible paths of global development according to varying investments into education. A publication with the title *Wer überlebt? Bildung entscheidet über die Zukunft der Menschheit* is due in February 2016 with a translation in English underway.

Traditional leadership, democracy and development in the rural eastern Cape: a study of futures past

Anne Mager spent six weeks at STIAS and is currently preparing a book-length manuscript on the topic.

Contingency and uncertainty: working with and against the state in South Africa

Shireen Hassim spent two months at STIAS during 2015 addressing the question under what kinds of assumptions women were able to make claims on the state to address gender inequalities. She will return to STIAS in 2016 with a group project dealing with *Governing intimacies: state, law and gender in South Africa*.

The theory and practice of social transformation through the arts

A group of four (Kim Berman, Cynthia Cohen, Michelle LeBaron and Kitche Magak) under the leadership of LeBaron participate in this project and three met at STIAS towards the end of 2015. They conducted a workshop at STIAS supported and funded by the Peter Wall Institute for Advanced Studies at the University of British Columbia as part of an existing agreement between STIAS and the PWIAS. A second visit to STIAS by LeBaron will take place in 2017, during which time the group will re-convene. A volume for publication in the STIAS series is in preparation.

Battling homophobia in the bid to protect East Africa's sexual minorities: a socio-legal analysis

Joe Oloka-Onyango's project at STIAS led to the book publication *Battling over human rights: twenty essays on law, politics and governance*.

HUMAN TODAY

STIAS LONGER-TERM THEME PROJECTS continued

STIAS longer-term theme: **Being human today**

Michelle LeBaron (University of British Columbia)

Kim Berman (Visiting scholar, University of Johannesburg), Cynthia Cohen (Visiting scholar, Brandeis University), Kitche Magak (Visiting scholar, Maseno University)

The theory and practice of social transformation through the arts

The world over and across time, the arts remain vitally important in fostering resilience and creating channels for reconciliation after conflict. This project blends South African, Kenyan, American, and Canadian scholarship, creative work and wisdom to explore how the arts are optimally used, and the best ways to gauge progress and success. Informed by fieldwork in diverse sites including Kisumu, Kenya and the Limpopo Province, South Africa, LeBaron and her team are working to advance understandings of the role of the arts in strengthening communities, smoothing fault lines and addressing inequities, while offering ways to

voice unspeakable truths and foster resilience. This work will strengthen local and global capacities to build peace and address fall-out from economic restructuring and social upheavals. By situating African experience at the heart of this collaboration, new ground will be broken in methodology, evaluation and arts-based practice.

While in residence at STIAS, the group advanced work into the potential and challenges of linking theory and practice in the broad field of arts and social transformation. STIAS was found to be an ideal place from which to integrate insights from African artists, culture-bearers, and change agents working in a variety of modalities and embodying diverse theories of change. Inquiry followed four related trajectories:

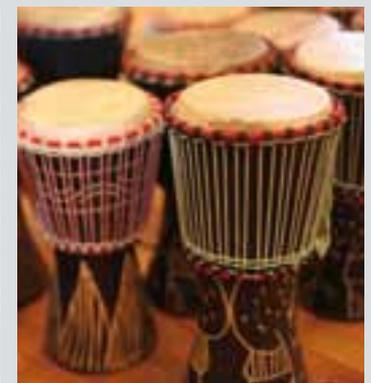
- Wall Colloquium Abroad – two international research colloquia are an integral part of the project bringing global experts – artists and scholars – in the field of arts and social transformation to STIAS. The first colloquium was held in November/December 2015 and the second will be hosted in 2017. For the five-day 2015 colloquium scholars and practitioners explored arts-based social transformation via multiple arts-based modalities. Colloquium activities included processing of narratives through multiple expressive modalities; critical reflection on material on a range of topics including social/economic fairness,

arts-based activism, and musicology; four lectures on relevant work from neuroscience; creative presentations by two-person teams on a spectrum of topics related to social transformation; and critical and reflective written input from all participants.

- Publications and other knowledge dissemination – substantial progress was made on the book *How creative communities transform* to be completed in 2018. Before and after the colloquium the proposed outline of the project was re-examined, key themes prioritised, and a work plan developed for the period between the 2015 and 2017 residencies at STIAS. In addition, work began on selecting and refining theoretical frameworks and requirements for publishing the book through STIAS.
- A series of electronic resources and podcast programmes were also explored. Many of the colloquium sessions were recorded via video or audio, and one-on-one interviews were conducted with several participants. Having secured permission from colloquium participants for their words and images to be used for online and other educational purposes, this material has become available as a resource for the book in progress. Over the next few months LeBaron and her team will create a pilot podcast series as a resource for students, scholars and practitioners in the field of arts and social transformation throughout Africa and globally. They anticipate that this initial dissemination will support efforts to raise additional funds to expand the podcast series. The series will be available through multiple channels, including a network of African researchers affiliated with a consortium of African universities.
- Concurrent work on several projects related to theory and practice of arts and social transformation were also completed.



*Left: Exploring ways to mobilise understanding
Below: Aesthetic responses to a genocidal narrative
Below right: Drums from Solms Delta wine farm*



Understanding complexity

Complexity and anticipation

All arrangements have been finalised for the visit of Roberto Poli (University of Trento) who will convene a group of five researchers during the beginning of 2016 on *Complexity and anticipation*.

Sustainable agro-ecosystems

Impact of sustainable intensification of agriculture on food security, the environment and human well-being across southern Africa

During October and November 2014 Richard Sikora (convenor, University of Bonn) and three core group members for the theme project *Sustainable agro-ecosystems* arranged a number of small expert workshops, primarily with experts from the southern African region. This provided a planning platform for the STIAS-Wallenberg Round Table in February 2015 on *Strategic directions for agricultural transformation in southern Africa*.

Multifunctionality in managed grassland systems – biodiversity and ecosystem services

Jan Bengtsson and Regina Lindborg concluded their project on *Multifunctionality in managed grassland systems – biodiversity and ecosystem services*. An invited paper on *Grasslands – more important for ecosystem services than you might think* is in press at *Climate Change Biology*.

The history of science in South Africa's national parks

Jane Carruthers spent three months at STIAS working on a book *Generating knowledge: conservation sciences in South Africa's national parks*. This covers various aspects of evidence-based environmental and ecological knowledge.

Green economy and Africa's leapfrogging opportunity

Desta Mebratu spent two months at STIAS working on *The transition to green economy: Africa's leapfrogging opportunity*.

Deeply equitable development: water provision and biodiversity offsetting in South Africa

David Takacs' project *Deeply equitable development: water provision and biodiversity offsetting in South Africa* led to the submission of two publication manuscripts.

Health in transition divided into Health prevention and Health care

Work in this theme is currently undertaken by various groups (mostly led by Swedish researchers), so far each with an own focus.

Health transition and injury care and prevention

Lucie Laflamme and Marie Hasselberg (Karolinska Institute) have for the past three years been working with South African colleagues at Stellenbosch University and the University of Cape Town on *Health transition and injury care and prevention*. This project concludes in 2016 when the two researchers return to STIAS, with a final period of residence in early 2017. First papers from this work have been published, with more in preparation. Current planning is that they will be involved in the planned 2017 Round Table on *m-Health* at STIAS, amongst others with Guy Dumont whose 2015 STIAS project dealt with *Toward reducing infant mortality via smart and low-cost pulse oximetry*.

Future bodies: preventing organ trafficking

Susanne Lundin continued work on *Future bodies. Preventing organ trafficking* together with Elmi Muller. In March 2015 Lundin convened a workshop on *Global bodies: health, hope and biotechnology*. The outcome of the workshop will be published in the STIAS series of book publications: *Global bodies in grey zones: health, hope, biotechnology* (eds) Susanne Lundin, Charlotte Kroløkke, Elmi Muller and Michael Nebeling Petersen, and will be launched in August 2016 at the meeting of the Transplant Society in Hong Kong.

Ethnic differences in obesity-related complications in South African women

Tommy Olsson and Lillemor Lundin-Olsson (Umeå University), working on *Ethnic differences in obesity-related complications in South African women* with colleagues from Stellenbosch University and the University of Cape Town, are expected to return to STIAS in 2016. They have published two papers from this work in 2015. STIAS is attempting to develop the theme of anti-obesity with Carlos Ibanez who spent two months at STIAS working on *New approaches to anti-obesity therapeutics* and renewed contact with Patrik Rorsman who has again expressed interest in the STIAS programme.

Urbanisation and health in Africa

Alex Ezech spent six weeks at STIAS working on *Urbanisation and health in Africa*. He also interacted intensively with the group of PhD students at Stellenbosch University supported by STIAS.

Making primary health care work for the poor: examining the quality and acceptability of public primary health care service in South Africa

Ulf Gerdtham returned to STIAS in November to work with the group of Servaas van der Berg (Stellenbosch University) on *Making primary health care work for the poor: examining the quality and acceptability of public primary health care service in South Africa*.

South African/Swedish effort on pre-hospital diagnostic of stroke and traumatic injuries

Mikael Persson explored a path towards implementation of cost-efficient, easy-to-use diagnostic tools for stroke in sub-Saharan Africa, where there are very limited resources in terms of medical personnel, hospitals and diagnostic devices. His initial finding is that thrombolytic therapy and stroke care remain considerable challenges in South Africa, and even more so in the other parts of sub-Saharan Africa; the need for cost-efficient, easy-to-use diagnostic tools for stroke and trauma is great. However, the resources for conducting studies aiming towards the introduction of such tools are currently minimal without securing public funding.

STIAS LONGER-TERM THEME PROJECTS continued

Crossing borders

Global human rights law and the boundaries of statehood

Hans Lindahl convened a workshop on *Boundaries and legal authority in a global context* in March 2015. The papers delivered there were published in 2015 in the *Indiana Journal of Global Legal Studies*, considered to be one of the top journals in the field. Lindahl fulfils the role of group leader and convener of a group that will reconvene at STIAS in 2016 and 2017 to continue working on *Global human rights law and the boundaries of statehood*. The group includes Abdullah An-Na'im (Emory University), Sofia Näsström (Uppsala University), Marcelo Neves (University of Brasilia), Sundhya Pahuja (University of Melbourne), and Kaarlo Tuori (University of Helsinki). Lindahl has also commenced work on a book *Inside and outside global law* for Cambridge University Press.

The construction of identity in the information age

Simon Bekker's project *Analysing sub-Saharan African states through a limited access lens* has led to three submitted papers. Simon Bekker also collaborated with STIAS fellow Mary Kinyanjui whose project dealt with *An alternative business model for an emerging 'African metropolis'*. A book publication *Utu-Ubuntu business model: indigenous markets and the evolution of an African metropolis* is in preparation.

Participants of workshop on Boundaries and legal authority in a global context. From left: Hans Lindahl, David Bilchitz, Neil Walker, Daniel Augenstein, Sheldon Leader, Larry Backer, Radu Mares, and Fleur Johns

Fiction and reality of mobility in Africa

The book manuscript which Francis Nyamnjoh worked on while at STIAS, *C'est l'homme qui fait l'homme – cul-de-sac ubuntu-ism in Côte d'Ivoire*, was published in 2015. He also published an article *Incompleteness: Frontier Africa and the currency of conviviality* in the *Journal of Asian and African Studies*.

Writing across borders/In praise of impurity

Oscar Hemer's project was directed at merging academic and literary practices in new forms, tentatively called ethnographic fictions, where genre borders are literally transgressed. Amongst others, he drew on the established discourse of *Purity-Impurity* outlined and analysed by British anthropologist Mary Douglas. Part of this work was presented as a paper at the conference of the International Association for Media and Communication Research in Montreal in July 2015; work towards a monograph continues.

Multilingual ecologies

Pieter Muysken continued work in which he studies multilingualism in the silver mines of Potosí (Colonial Alto Perú, now Bolivia) which involves creating a typology of mining languages (Fanagalo from Gauteng and beyond being a prime example). Herein a number of factors play a role: rapid expansion and migration, the multi-ethnic composition of the workforce, binding to a locality, gender and male bonding, concerns for danger and safety, special technology, job specialisation, and life underground as distinct from above ground. Three papers related to this work were prepared during his residency at STIAS.

The future of democracy

Democracy at the crossroads

STIAS fellows Radoslaw Markowski and Hans-Dieter Klingemann completed international studies on respectively normative, performance and legitimacy changes in contemporary democracies during the economic crisis (focusing on two stable democracies Sweden and Germany) and five new ones, "as different as Chile, Korea, Poland, South Africa and Turkey" and the impact of the global recession on party policy preferences. A paper on *Market economy or social welfare policy? The programmatic responses of political parties to the global recession* by Klingemann was published in a special issue of the *Taiwan Journal of Democracy*.

The role of constitutions

Charles Fombad convened the third Stellenbosch Annual Seminar on Constitutionalism in Africa (SASCA) on the theme *Constitutional adjudication in Africa*. Papers delivered at this seminar will appear in the second volume of a new Oxford University Press series *Stellenbosch handbooks on African constitutional law*. (The first volume, based on the 2014 SASCA, will be on *Separation of powers in African constitutionalism* and is due for publication by Oxford University Press in March 2016.)

Property: constitutional obstacle or key?

Johan Froneman grappled with a key question about property in South Africa: whether (and how) the acquisition, holding and protection of various forms of property are/could be compatible with the fundamental values of dignity, equality and freedom enshrined in the South African constitution. He offered some historical insights with particular emphasis on how notions of economic efficiency could be used to play a constructive role, given the divided historical context.



THE FUTU



SASCA 2015

Front row, from left: Calixte Aristide Mbari, Kwame Frimpong, Justice Richard Goldstone, Bhadra Ranchod, Justice Samuel Kofi Date-Bah, Justice Johan Froneman, Hendrik Geyer

Middle row: Michelle Galloway, Francois Venter, Bnolo Dinokopila, Magnus Killander, Bugalo Maripe, Kofi Quashigah, Samson Itodo, Horace Adjolohoun, Ameze Guobadia, Charles Fombad

Back row: Andre Thomashausen, Johann Groenewald, Alois Madheken, James Fowkes, Arne Wulff, Christa Rautenbach, Mphathi Mutloane, Phindile Ntiziwana, Dickson Kahama, Annet Amin

STIAS longer-term theme: The future of democracy

The role of constitutions (convenor Charles Fombad)

The Third Stellenbosch Annual Seminar on Constitutionalism in Africa (SASCA 2015) jointly organised by the Institute for International and Comparative Law in Africa (ICLA) of the Faculty of Law, University of Pretoria and STIAS was held in Stellenbosch from 16 to 18 September 2015. The theme was *Constitutional adjudication in Africa*.

The theme was premised on the fact that Africa now provides an excellent example of the interplay of the diverse forms of constitutional review models and the prospects for new developments in constitutional adjudication. Over the last two decades some of these courts have been asked to decide a litany of hotly contested and often controversial social, political

and economic questions. As the list of areas in which these courts intervene has grown, so too have their powers, actual or potential. By identifying the different models of constitutional review that have been adopted in the last two decades, the seminar investigated the different ways in which these courts were contributing to enhancing constitutionalism and respect for the rule of law on the continent.

The main issues that were discussed during the eight sessions were: archetypical examples of the different models of constitutional adjudication; the impact of transjudicialism on constitutional adjudication; constitutional adjudication and the promotion of constitutionalism; and decision-making and working practices of African constitutional courts.

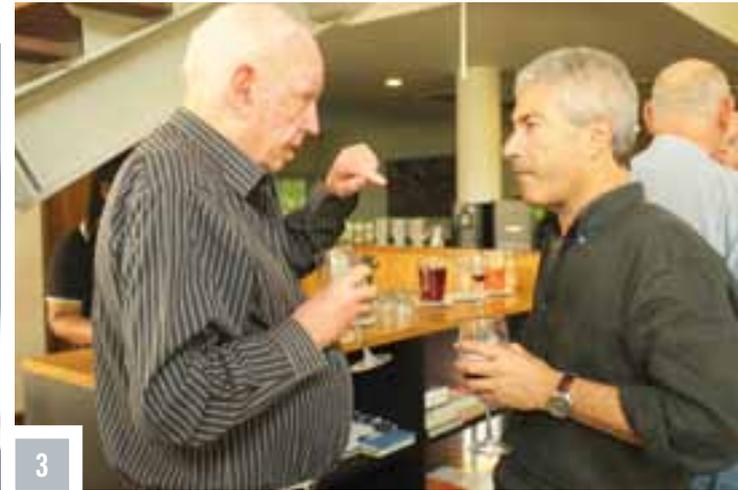
As in previous years the seminar was attended by both senior and junior academics from all over Africa (including Botswana, Benin, Cameroon, Ghana, Nigeria and South Africa). Also

in attendance were eminent active judges (Justice Johan Froneman of the South African Constitutional Court), as well as retired judges (Justice Richard Goldstone, former judge of the South African Constitutional Court, and Justice Kofi Date-Bah, former judge in the Supreme Court of Ghana). In keeping with the goal of disseminating knowledge and enhancing the capacity development of future scholars in this important area, doctoral students from Stellenbosch University, the University of Cape Town and the University of Western Cape also attended. Other participants included Calixt Mbari, the Head of the African Union Programme on Constitutionalism and Rule of Law, and Arne Wulff, Director of the Rule of Law Programme for sub-Saharan Africa at the Konrad Adenauer Foundation.

The papers presented during the seminar will be reviewed for possible publication in the second book of the new Oxford University Press series, *Stellenbosch handbooks on African constitutional law*. The first volume, *Separation of powers in African constitutionalism*, based on SASCA 2014, is due for publication by Oxford University Press in March 2016. The theme for SASCA 2016 was confirmed at SASCA 2015, namely *Decentralisation and constitutionalism in Africa*.

STIAS FELLOWS AND PROJECTS

Seventy-five fellows and nine visiting scholars participated in the 2015 programme for a total of 146 fellowship months. Fifty seminars were presented in the fellows' seminar series and six public STIAS lectures were presented on the campus of Stellenbosch University. The STIAS programme has continued to reflect an emphasis on projects which draw on an interdisciplinary basis, are considered relevant to the (South) African context, and address topical issues of the day. An increasing component represents activities within the seven longer-term theme projects.





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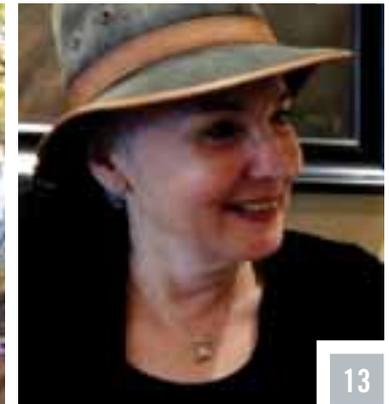


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1. From left: Anders Högberg, Peter Gärdenfors, Marilze Lombard, Lars Larsson, Rudie Botha
2. Alex Ezeh
3. Fritz Hahne and Sam Dubow
4. Chabani Manganyi
5. Desta Mebratu
6. Ben and Ulrike Davy
7. Barney Pityana and Njabulo Ndebele
8. Front row, from left: Pontus, Braunerhjelm, Shireen Hassim, Anne Baker, Athol Fugard, Sian Supski, Margareta Bergendahl
Back row, from left: Peter Beilharz, Hugh Mellor, Saul Dubow, Pieter Muysken, Johan Froneman, Vidyandand Nanjundiah, Ernst Conradie, Charles Fombad

STIAS FELLOWS AND PROJECTS continued

9. Francis Nyamnjoh
10. Vidyanand Nanjundiah and Albert Goldbeter
11. Jane Carruthers
12. From left: seated – Mary Kinyanjui, Radoslaw Markowski, Nils Jansen, Hans-Dieter Klingemann, Oscar Hemer, Joe Oloka-Onyango
Standing – Berhanu Abegaz, David Takacs, Denis-Constant Martin, Desta Mebratu, Mats Rosengren, Nat Colletta, JM Coetzee, Alex Ezeh, Francis Nyamnjoh
13. Anne Baker



STIAS-WALLENBERG ROUND TABLE

Third STIAS-Wallenberg Round Table meeting on *Strategic directions for agricultural transformation in southern Africa*

Since 2013 the Marianne and Marcus Wallenberg Foundation has provided funding for an annual Round Table forum where South African and Swedish representatives as well as the broader international community can engage in dialogue and debate around a theme, typically a current global challenge with a focus on its local manifestation. The STIAS-Wallenberg Round Tables provide a platform for dialogue between academia, policymakers, professionals and practitioners, business and industry, civil society and, where possible, intended beneficiaries. The idea behind the annual Round Table forum at STIAS is that research of the highest level should be done not only for its own sake but also for the benefit of humanity, with due emphasis on the continental context in which STIAS finds itself; and, that all stakeholders be afforded equal status in presenting their views and questioning the views of others.

The third annual STIAS-Wallenberg Round Table focused on the theme of *Strategic directions for agricultural transformation in southern Africa* and took place on 23 and 24 February 2015. Instead of a single workshop to prepare and plan for this Round Table, a group of four STIAS fellows (Richard Sikora (convenor), Janos Bogárdi, Lukas Gakale and Eugene Terry) working on the STIAS longer-term theme of *Sustainable agro-ecosystems*, organised a series of small seminars and workshops with a succession of experts from the region to interrogate various aspects of the topic during October and November 2014. These seminars fed into the development of the Round Table programme and participants' list which were finalised with the assistance of Maud Olofsson (former Swedish Minister for Enterprise and Energy (2006 to 2011) and Deputy Prime Minister (2006 to 2010)) and STIAS staff. This resulted in over 60 international and regional participants from various sectors attending the Round Table meeting to discuss strategic directions for agricultural transformation in southern Africa.

The Round Table aimed to elucidate several outcomes including a vision for agricultural transformation, the major reforms and resources required, and a roadmap for effective implementation.

The vision proposed by the participants was 'agricultural intensification at multiple scales with broad stakeholder participation for food and nutritional security in southern Africa'.

Participants envisaged agriculture in the region which relies on the region's natural, human and financial resources to create wealth and jobs, and ensure sustainable food and nutritional security; which allowed for innovative farming models at different scales; and, will be competitive and integrated into the regional economy through value chains.

The Round Table also attracted significant media interest, with journalists attending some of the sessions, and this resulted in a number of articles in South African publications. Other immediate outputs included a meeting report that will form the nucleus of the ongoing work in this STIAS theme.



Participants of the Agricultural Transformation Round Table at STIAS

SELECTED PROJECT PROFILES

Karin van Marle (University of Pretoria)

The becoming of post-apartheid jurisprudence: towards a minor jurisprudence of generosity

The project focused on the interdisciplinary possibilities of law to constitute a discourse of transformation for post-apartheid South Africa. It was an investigation of the notion of becoming (in a Deleuzian register); specifically the becoming of a 'minor' jurisprudence of generosity (following the work of Peter Goodrich). By reading literary and jurisprudential narratives it was attempted to articulate a theory of law's law that spans both letter and spirit, text and context, form and content.

The notion of transformation is central to the becoming of post-apartheid jurisprudence. The central concern of the project was to advance the idea of a post-apartheid jurisprudence that could engage with the notion of transformation. However, the aim here was not to engage with law in a narrow sense but to draw on literature, narratives and other aesthetic forms.

Readings and meanings of jurisprudence (Douzinas and Gearey) were followed that distinguish between restricted jurisprudence – a modernist understanding of jurisprudence as nothing but a technical application and development of rules by way of legal precedent – and a general jurisprudence that situates law within a realm of politics, philosophy, language and most pertinently justice. It is the latter meaning that is followed in Van Marle's contemplation of jurisprudence in the aftermath of official apartheid.

During the time at STIAS in 2014 and 2015 the following sub-themes came to the fore:

- The notion of the 'counter- archive' and reflective nostalgia as a staging of dissensus;
- The politics of memory; how it engages notions of archive, nostalgia and manifests in constitutional theory and jurisprudential discourse;
- Related to the above the notion of spatial justice and how it relates to jurisprudential discourses on land and property;

- Notions of humanity, community and conditions for a 'healthy' society, and
- Transformative legal education or the role of legal education in transformation.

In an article *Thought as condition for a healthy society*, that in a way captures the gist of the main contestation of the project, Van Marle reflected on the notion of transformation, equality and interdependence by focusing on events and narratives that played out in Pretoria/Tshwane around the eviction of a large number of families from an apartment block, Schubartpark. She placed this reflection against the background of a series of photos taken by photographer Herman Verwey, entitled 'post-apocalyptic Schubartpark'. She read the apartment complex to stand in the tradition of modernity, in particular the instrumental rationality that brought about, as argued by Henri Lefebvre, a shift from inhabitation to habitat. This shift, that brought about an alienation between the state and its citizens, is well demonstrated by the events that occurred and as illustrated by the Verwey photos.

It should be said the nature of the project, the investigation, or rather reflection/contemplation is that it is continuous, and tentative. No final conclusions or findings could or should be offered.

A number of publications appeared in 2014 and 2015, and a chapter in a book to be published by Routledge is forthcoming in 2016.

Images from the series Post-apocalyptic Schubartpark



Nat Colletta (New College of Florida)

A comparative study of donor and state policies and operational approaches to addressing forced displacement due to armed conflict in the Horn of Africa

The global population of forcibly displaced persons due to armed conflict is about 44 million, comprising about 15,2 million refugees and 28,8 million internally displaced persons (IDPs). About one third of these displaced are found in Africa consisting of 10,5 million IDPs and 2,7 million refugees. The Horn of Africa contains over half of those displaced in Africa, or about 8,2 million persons (2,1 million refugees and 6,1 million IDPs). In South Africa, the Department of Home Affairs (DHA) reports about 70 000 new asylum claims in 2013 from over 80 countries worldwide. Among these some 9 000 are from Ethiopia and Somalia alone. The outward cry of local South Africans in the townships accusing African 'foreigners' of taking their jobs in an environment of high youth unemployment has led to violent attacks and calls for them to return to their home countries.

Somalis and others in informal settlements with limited access to the formal labour market, manage small stores (*spazas*). Their success becomes a symbol and target of South Africans they serve in these 'no-go zones' where crime, poverty and unemployment reign. Mistrust and resentment loom large as refugees are stigmatised as criminal elements and bearers of disease. Local politicians have used them as a political mobilising pawn. The DHA has adopted an expanded assumption of illegality and often acts outside of the legal framework under the guise of security. Migration has been framed as a security issue.

The protracted nature of forced displacement and its impact on host communities presented an opportune time to examine the comparative experience of donor and state policies and operational approaches to addressing forced displacement brought about by violence, insecurity and flight. A downward spiral of risks facing refugees and IDPs such as landlessness, joblessness, homelessness, food insecurity, loss of access to property resources, increased morbidity, and community disarticulation have culminated in increased social marginalisation and conflict when integrating into host communities.



Somali refugees in Dolo Ado, Ethiopia with Nat Colletta on a joint United Nations High Commissioner for Refugees and World Bank mission

The conventional displacement paradigm had focused on a *humanitarian response*. However, as the displacement experience has become more protracted, there is a growing need to find durable solutions incorporating a *development response*. Such a response bridges relief and development, shifting attention to the social and economic impact on host communities. More sustainable development-oriented approaches have included: (1) addressing legal challenges especially citizenship rights; (2) economic rights and livelihood opportunities and; (3) social and cultural integration. Time at STIAS was spent on reflecting on and writing about displacement and development.

This study resulted in an article accepted for publication in the journal, *The African Human Mobility Review*. The article analysed donor and state approaches to protracted displacement in the Horn of Africa. It draws lessons from both humanitarian and development policies and practices seeking durable solutions. It focused on social and economic integration of displaced persons into receptor communities, their return and reintegration into their countries/communities of origin, and/or resettlement into third countries. In addition to the Horn of Africa, the author expanded the work to South Africa by interviewing recent Somali refugees from the Horn and local shopkeepers involved in clashes emanating from a spate of 'afrophobic' reaction to job competition and wage and price impacts in Cape Town and Stellenbosch.

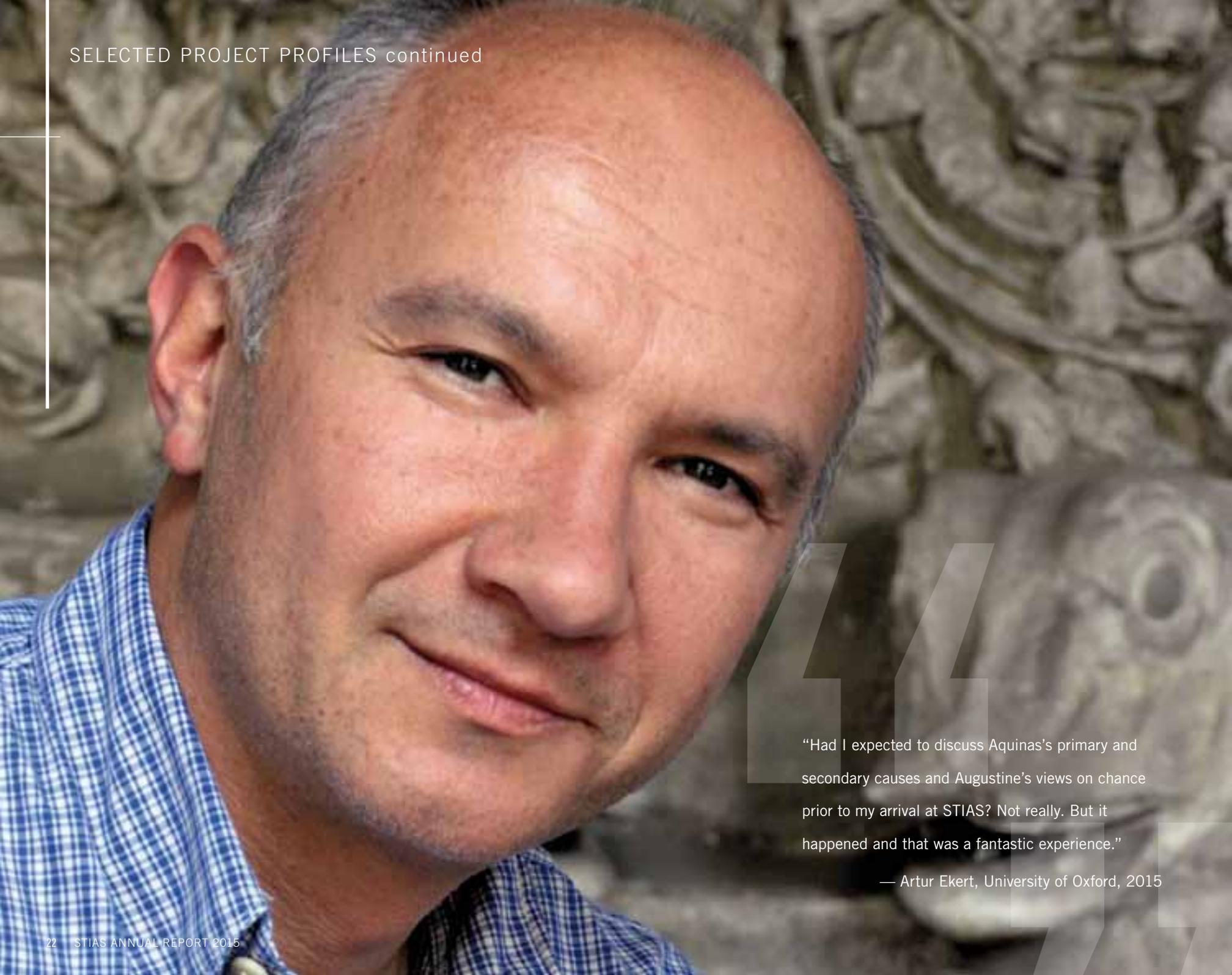


Peter Beilharz (Curtin University)

Sian Supski (Visiting scholar, Monash University)

Modernity and modernism in everyday life – South Africa and Australia in the 20th century

Beilharz and Supski work as sociologists, but took advantage of the space and culture of STIAS to open another window onto South African cities, modernity and modernism: writing, in particular the work of Ivan Vladislavić, a previous STIAS fellow. The purpose of the project was to detail the fibre and extent of his achievement via the journal, *Thesis Eleven*. First results include a special section introducing his work, with a survey by Beilharz and Supski, a piece by Vladislavić, and an interview with him, to be published in 2016. Current work is on a *catalogue raisonné* of his work, to appear in *Thesis Eleven* in 2017, as well as a dedicated issue of the journal on his city, Johannesburg, also for 2017. This latter results from an event held in 2015 at the Johannesburg Institute for Advanced Study, with the support of STIAS. The next step will be working toward a follow-up event with Vladislavić at Curtin in Perth in 2017. Results of the project are expected to percolate through the next several years, not least as work through the implications of Vladislavić's experimental approach to the use of both word and image progresses, this with especial reference to photography and architecture, and for this project, housing in South Africa and Australia in the post-war period.



“Had I expected to discuss Aquinas’s primary and secondary causes and Augustine’s views on chance prior to my arrival at STIAS? Not really. But it happened and that was a fantastic experience.”

— Artur Ekert, University of Oxford, 2015

Artur Ekert (University of Oxford)

Renato Renner (ETH Zürich)

Miklos Santha (Université Paris Diderot – Paris 7)

Thomas Vidick (California Institute of Technology)

The nature of randomness and the fundamental physical limits of secrecy

People have always been fascinated by randomness and intrigued by the fundamental question – is any outcome that appears random to us only so by virtue of our ignorance, or do there exist experiments whose outcome is inherently unpredictable to any observer, no matter how powerful or omniscient they might be?

Quantum theory, which rules out sharp predictions of measurement outcomes, does not necessarily imply that nature is truly random. Even Bell inequalities, violation of which excludes the possibility for quantum phenomena to be explained by a hidden deterministic theory, tacitly assume that experimentalists are able to make free, that is random and independent, choices during each run of their experiments. That is, in order to get randomness out, they need to put randomness in. However, it has been shown that this can at least be done with a net benefit – randomness can be amplified and expanded.

Randomness amplification has triggered a flurry of research activity, culminating in a striking result: any process that is not completely deterministic can be leveraged to generate arbitrarily long sequences of perfectly random bits. This can be achieved while placing minimal assumptions on the physical devices used to achieve this remarkable feat; in particular, while correctness of quantum mechanics is assumed, no further *a priori* assumption on any of the processes involved in the randomness amplification task is needed.

A number of productive discussions, both within the group of STIAS fellows and visitors, led to formulating new research directions and ideas, to mention only the concept of entropy accumulation, cryptographic applications of weak randomness or the role of De Finetti's theorem in assessing statistical independence in random sequences. Some of the discussions involved other STIAS fellows and touched upon more fundamental aspects, in particular, the role of time and causality in defining and quantifying the quality of randomness and connections between randomness and the measurement problem in quantum mechanics.

A scientific highlight of the project was the Workshop on Foundations of Randomness, which brought together world-experts from different fields, including computer science, cryptography, information theory, mathematics, philosophy of science, and physics. The talks during the three-day programme covered a number of different aspects of randomness, starting from the meaning of randomness in physics (first day), techniques to process, extract, and amplify randomness (second day), as well as the use of weak randomness, e.g. in cryptography (third day). Ample time was left for informal discussions, which, as all participants agreed, were extremely fruitful. A comprehensive summary of the workshop by Thomas Vidick, is available at users.cms.caltech.edu/~vidick/foundations2015.html.

The project and the workshop have stimulated participants to explore the notion of randomness from new perspectives, with few new promising ideas currently under development and interesting results on the horizon.

Guy Dumont (The University of British Columbia)

Toward reducing infant mortality via smart and low-cost pulse oximetry

Sepsis kills over six million children in the developing world every year, many of those die at home and thus it is believed that a distributed, community-based intervention would be most effective in reducing mortality. Dumont is part of a multidisciplinary research group that wants to put an end to this carnage by developing an easy-to-use and robust

mobile health platform for early screening and diagnosis in low-resource settings. Pulse oximetry allows the measurement of blood oxygen saturation (sometimes called the fifth vital sign). A low-cost pulse oximeter has been developed by connecting a simple probe to a mobile phone through the universally available audio jack. However, technology needs to be developed specifically tailored for spot check monitoring of neonates and infants, and in particular to develop reliable methods of detecting and rejecting artifacts created by movements. This will provide a reliable tool for community health workers to screen those infants in need of urgent care. It is hoped that such early and timely intervention will significantly reduce neonate/infant mortality.

The research group's approach is based on the integration of a miniaturised 3-axis accelerometer on the pulse oximetry finger probe to provide a measurement of the probe movement. By using the accelerometric measurements it was possible to reduce the impact of movement artifact via adaptive noise cancellation techniques. Dumont started this project in collaboration with Cornie Scheffer, from the biomedical engineering group at Stellenbosch University who unfortunately passed away on 20 February 2015, shortly after Dumont's arrival at STIAS. The necessary restructuring of the team resulted in significant disruption and delays. Since Dumont's return to Canada he has continued collaborating with a master's student at Stellenbosch University who has made progress in developing both the hardware and signal processing algorithms as part of her thesis work, in parallel with his team at UBC.

Dumont's stay at STIAS resulted in a conference paper titled *Shedding a new light on global health* presented during a special invited session at the IEEE Engineering in Medicine and Biology Conference in Milan in August 2015, titled *Biomedical Engineering in South Africa (honouring the memory of Prof Cornie Scheffer)*. He also wrote the paper *Signal processing and automation in anesthesia* that appeared in the *IEEE Signal Processing Magazine*. In addition, and as a result of his STIAS fellowship, Dumont is planning to organise a workshop on technology for maternal, newborn and child health at STIAS in 2017, addressing the technological needs for reducing maternal, newborn and child mortality in low- and middle-income countries.

Mikael Persson (Chalmers University of Technology)

South African/Swedish effort on pre-hospital diagnostic of stroke and traumatic injuries

Stroke care represents one of the major global unmet challenges of the global health care system. Out of the 17 million yearly global sufferers, five million die and another five million are permanently disabled. A large proportion has dysfunctions which seriously affect quality of life for the patient and relatives. In the western world, stroke is



placed third among reasons for acute death, and first among reasons for neurological dysfunction, resulting in most days of hospital nursing and therefore the most costly disease within western world health care. In the developing world detailed statistics are more uncertain but the number of stroke cases is increasing at an accelerating, unsustainable rate.

The purpose of this project was to start the path towards implementation of cost-efficient, easy-to-use, diagnostic tools for stroke in sub-Saharan Africa, where there are very limited resources in terms of medical personnel, hospitals and diagnostic devices. A finding of these studies is that thrombolytic therapy and stroke care in general remain considerable challenges in South Africa and even more so in the other parts of sub-Saharan Africa. Meetings at the public health care system as represented by the Department of Neurology at the Groote Schuur Hospital and the Centre for Rehabilitation Studies suggested that the need for cost-efficient, easy-to-use diagnostic tools for stroke and trauma is great. However, the resources for participating in studies aiming towards the introduction of such tools are minimal without public funding. In the period after Persson's fellowship, in the absence of such funding, the project has been focused on the introduction of the technology in the western world including an ambulance study and a trauma study at the Sahlgrenska University Hospital in Gothenburg, Sweden.

Mikael Persson with stroke diagnostic device



Saul Dubow (Queen Mary University of London)

The scientific imagination in South Africa

Substantial progress was made during this STIAS fellowship on a collaborative book, jointly written with William Beinart and Patrick Harries, entitled *The scientific imagination in South Africa*. The book covers the period from the 18th century to the present, beginning with the first European encounter with the sub-continent as seen through the eyes of missionaries, travellers and collectors. One important theme is the encounter between 'western' and 'indigenous' knowledge systems in fields ranging from botany and veterinary science to cosmology and astronomy. Another is the way in which scientific culture established itself at the southern tip of Africa, and how this has supported competing ideas of 'South Africanness'. A third focuses on the complex flows and circulation of knowledge between metropolitan science based in the capital cities of Europe and discoveries made on the frontiers of the colonial world.

The assumption that science is a neutral endeavour is thoroughly questioned throughout in this book. Rather, science is viewed as a set of social and intellectual practices that are deeply embedded in society. Science, understood as a field of mutual intellectual exchange and cultural interaction, can provide important perspectives on colonialism, imperialism, and nationalism (African and Afrikaner) – all key themes in South Africa's history. Because scientific traditions can be traced over more than 300 years, such thinking is ideally suited to understanding the ways in which South Africa and South Africanness have developed over this long period.

In the course of a productive fellowship at STIAS, it was possible to write and research on contemporary topics like astronomy, geology, palaeontology and botany, as well as aspects of apartheid modernity: the Council for Scientific and Industrial Research (CSIR), oil-from-coal technology, nuclearisation, and large dam-building. "The ready availability – and generosity – of Stellenbosch-based scientists expert in physics, biology, and ecology, as well as input from STIAS fellows, proved enormously helpful in explaining and debating key concepts and ideas. Our collective project has benefitted enormously from these interactions", said Saul Dubow.

Peter Gärdenfors (Lund University)

Rudie Botha (Utrecht Institute of Linguistics,
Stellenbosch University)

Anders Högberg (Linneaus University)

Lars Larsson (Lund University)

Marlize Lombard (University of Johannesburg)

**How did *Homo sapiens* become *Homo docens*?
On the evolution of social learning and teaching
during the palaeolithic**

Animals learn from each other by imitating, but they do not actively teach. In contrast, teaching is found in all human cultures. The main question of the project is to understand why teaching has evolved only in the line leading to *Homo sapiens*. This is addressed by combining theoretical models with an analysis of archaeological material from Africa and elsewhere.

The theoretical part of the work has identified several levels of teaching: approval/disapproval, drawing attention, demonstrating, communicating concepts, and explaining relations between concepts. Only the last two levels require linguistic communication, while the earlier can be achieved via gestures. The project also connects to different theories of the evolution of language to the evolution of causal thinking.

The archaeological part concerns what conclusions relating to teaching can be drawn from material remnants. Different stone knapping technologies were analysed, in particular the Oldowan, which, it is argued, requires teaching by demonstration, and the Acheulean, which is argued to require teaching by communicating concepts. Another project area concerns how hunting techniques are taught and how tracking skills have evolved.

During the first period at STIAS a workshop was organised that included a number of well-known international and South African speakers. A number of papers emerged from the workshop and these have been published as a special issue of *Cambridge Archaeological Journal* 2015. In addition Rudie Botha published the book *Language evolution: the windows approach* (Cambridge University Press 2015). Several other papers by members of the project group have been published or are forthcoming.



The evolution of teaching hunting techniques and tracking skills

Erika de Wet (University of Pretoria,
University of Bonn)

**The modern practice of intervention by invitation
and its implications for the prohibition of the use
of force**

The research undertaken at STIAS forms part of a book project for which De Wet is under contract with Oxford University Press for publication in 2019. The project examines how the criteria for permissible military intervention by invitation as developed in international law doctrine are currently implemented by states, as well as how this impacts the prohibition of the use of force against the territorial integrity or political independence of states. Controversies concern, in particular, the determination of the authority entitled to extend the invitation, as inter alia illustrated by the Russian claim that its military intervention in the Crimea in 2014 was based on the invitation of (former) President

Yanukovych. Does the inviting authority need to enjoy democratic legitimacy, or is effective control (still) the point of departure for determining the legitimate government of a state? Furthermore, it remains highly contentious whether an invitation for forcible intervention may be extended during a civil war. Once recognised, how much discretion does the incumbent government enjoy when inviting military assistance from foreign governments? Do incumbent governments retain the right to military assistance even in situations of civil war and while exercising limited control over the territory? Or would an intervention under these circumstances violate the right to self-determination and, in turn, the prohibition of the use of force?

While at STIAS, De Wet finalised an article focusing specifically on the modern state practice of intervention by invitation in Africa. It was published in 2015 in the *European Journal of International Law*, a leading journal in the field.

Edward Webster (University of the Witwatersrand)

Labour after globalisation: new forms of organisation, new sources of power

The focus of this project is on how globalisation has been a double process of, on the one hand, integration of a core of highly skilled and highly paid professionals and consultants. On the other hand, it leads to the exclusion of a growing number of young, working and 'workless' people. In order to understand this contradictory process, research was undertaken to explore the lives of the excluded and marginalised in Gauteng: the illegal miners working in abandoned gold mines on the edge of Soweto; undocumented immigrants working in clothing sweatshops in the inner city of Johannesburg; waitresses in Johannesburg's up-market restaurants; private security guards, the fastest growing occupation in South Africa; waste recyclers roaming the streets like latter-day 'hunters and gatherers', and those working in the horticultural sector in the peri-urban areas

surrounding the city. They constitute a new political subject of labour: women, immigrants, low-paid service workers, casual and outsourced workers, precarious workers. Indeed, Guy Standing describes them as 'a new dangerous class', which he calls the precariat. They are not simply 'victims'; the evidence gathered indicates that they may also resist, organise informally and make advances in their lives when the opportunity arises. Asef Bayat calls it "the quiet encroachment of the ordinary".

But they have also begun to react in more robust ways, altering the grammar of social conflict. From the Arab Spring, to the 'movement of the squares' in southern Europe, to the 'fees must fall' campaign amongst students in South Africa, streets have become sites of massive demonstrations, strikes, occupations, blocking of highways and places of entry, riots, rebellions and revolution. These initiatives, organisational forms and sources of power are emerging on the periphery of traditional trade unions and political parties. They are discovering the power to disrupt production when they are not satisfied with their working conditions, and employers

cannot afford to allow this to happen given the strict delivery requirements in the new global order. For example, workers on the large grape farms in north-eastern Brazil have been able to take advantage of the pressures on suppliers to deliver high-quality grapes on time for the European market. The existence of information technology and social media ensure the rapid spread of these actions, as STIAS fellow Manuel Castells describes in his book on social movements in the internet age, *Networks of outrage and hope*.

The conceptual framework Webster has developed identifies four sources of power: structural, associational, societal and institutional. The first two are traditional, age-old sources of power. The third is a new source of power as it draws on the public arena through social media with the aim of restoring the dignity of and justice for, socially devalued and economically marginalised workers. A source of power neglected by these new actors is institutional power; through agreements and laws, institutions grant rights to citizens but they also limit the space for action. It is the limit on action that these new 'political subjects' often ignore, opening the door to violence against property and person. This raises complex human rights questions.

The outcome of the time at STIAS was a reconceptualisation of the project and the completion of an introduction to the manuscript *Labour after globalisation: old and new sources of power* published as a chapter in a book in 2015, Bieler A et al (eds). *Labour and transnational action in times of crisis: from case studies to theory*, Rowman and Littlefield International, London. The manuscript will be completed in 2016/2017.



Precarious workers

Far left: Three women involved in illegal mining with their babies on their backs

Left: A woman overladen with recycled waste collected on the streets of Johannesburg

Johan Froneman (Constitutional Court of South Africa)

Property – obstacle or key to success for South Africa's constitutional democracy?

The inclusion of a clause protecting the deprivation of property in South Africa's constitution was controversial. Does the express constitutional protection of property rights inhibit or enhance the constitutional project of post-colonial recovery from distributive injustice?

The task of finding some common conception of property and why it should be protected in the South African constitutional democracy is a daunting one. It nevertheless lies at the heart of the question whether our democracy is to succeed and thrive. The emergence of private property as essential to capitalistic economic development arrived late in South Africa, and then only primarily for the privileged white minority of colonial settlers. Whatever the chances were of the majority indigenous people adopting that individualised notion of property and participating in a market economy was complicated by traditional notions of communal property and then effectively obliterated by a racial and economic system that restricted the holding of private property in the hands of the white minority. Coupled to this was the ideological battle between capitalist and socialist notions of economic development. Although the collapse of communism might have seemed to bring an end to that debate, the international financial crises in the first decade of this century, the emergence of China as a global economic power and the apparent historical antipathy to capitalism in the liberation movements means that the idea of private property as necessary for economic development, and its protection as essential to constitutional democracy, is still fiercely contested.

Time at STIAS during this fellowship was used to reflect on and gain a deeper understanding of the historical, cultural, economic and political context that shapes the debate around the importance of property to the success of the South African constitutional experiment. Particular emphasis was given to how notions of economic efficiency could be used to play a constructive role, given the divided historical context. The Coase theorem in economics seems to tell us that no matter who owns property at the start, as long as those property rights are fully specified, an economically efficient outcome

will be reached. This means that no-one will be left worse off. Quite often, the argument is taken further, namely that to make a legal change from this economically efficient outcome would result in an economically inefficient outcome and should not be done. Translated into the South African debate on the merits and demerits of property, it is then used as a justification against the post-colonial redress of distributive injustice. This is unhelpful.

A more plausible argument from a free market economic perspective would be to accept that colonial and apartheid economic history shows that the market was fundamentally distorted by both market and government failures and that post-apartheid economic policy must be geared to correct these historical failures. The economic argument needs to convince sceptics that the path to a society where many people can envisage a better future is one that must pass through the production of new wealth and not merely diverting wealth from others. New Institutional Economics is an approach that seeks to do that by attempting to demonstrate that there is enough evidence to show that a relatively precise structure of 'institutions' will lower transaction costs and thereby facilitate economic growth. It might then be possible to construct an argument that, given the fact that our pre-constitutional allocation of property rights hardly qualifies for an endorsement on the grounds of economic efficiency, there can be no principled objection from an economic point of view to the redress of that distributive injustice by way of expropriation and other measures to enable access to property rights on an equitable basis. The real question then is to determine the extent of the 'transactional costs' that could be tolerated in order to allow for the development of our human capital, for technological advancement, adaptive efficiency and a path to the production of wealth, not rent-seeking. The debate would then move from slogans about economic efficiency to a rational debate about where to draw the line between the protection of existing wealth, the transfer of wealth to the previously disadvantaged and the production of new wealth.

Froneman concludes: "The purpose of the fellowship was practical, to understand the problems surrounding property better. This rare and wonderful opportunity at STIAS provided deep, enriching and lasting personal insights into this challenge to our country."

Lars Pettersson (KTH Royal Institute of Technology)

Challenges and opportunities for the transport sector

The issue of sustainable energy supply is a global problem for pursuing future efforts in the energy area. In countries such as China and India there is a tremendous growth at the moment, which is envisaged by an ever-growing demand for vehicles. Hence, one of the grand challenges of society is to meet the demands for sustainable and environmentally friendly technologies in the transport sector. One way to tackle the problem of growing concentrations of carbon dioxide, which is believed to contribute to global warming, is the use of biofuels. In this project specific challenges related to the production and use of biofuels in heavy-duty trucks and how they influence the emission after-treatment system in the truck were identified. During 2015 several events were reported in Europe regarding severe air pollution problems connected to traffic. This research at STIAS has resulted in three papers published in international high-impact scientific journals in the chemical engineering area.

As the only engineer at STIAS during his stay, Pettersson had an excellent opportunity to reflect on the role of engineers in a modern multi-cultural society. Apart from his research tasks his stay at STIAS inspired him to develop a new course in chemical process engineering at KTH. In this course the importance of chemical engineering in sustainable development is discussed. An important outcome of discussions with STIAS fellows was that one of them gave him access to private archives on fracking. This will be valuable in his ongoing work on energy sources.

Pettersson's STIAS seminar *The black gold – the stuff that changed the world* has led to invitations from universities in Finland (twice) and Norway. Furthermore, he has also discussed the history of oil at a seminar, which he gave at an oil company in Sweden. His work at STIAS has led him to further investigate the role of fuels in emission after-treatment and this has led to an invitation to give a lecture at the 16th International Congress on Catalysis in Beijing in July 2016 which is the world's largest conference in catalysis.

“If I were to be asked to use one word to describe my six-week stay at STIAS it would be ‘IMMERSION’ ...total and complete IMMERSION. Let me explain. I have been on many fellowships and visitor-ships, but none of them have allowed me totally free reign to just think, reflect and write. I found it at STIAS.”

— Joe Oloka-Onyango, Makerere University, 2015



Joe Oloka-Onyango (Makerere University)

Battling homophobia in the bid to protect East Africa's sexual minorities: a socio-legal analysis

Recent political and judicial battles over the rights of sexual minorities in East Africa have witnessed the introduction of new constricting legislation, judicial interventions and civil society action both in favour and against the expansion of the 'right to love.' In the light of these developments, the research examined only one of the sites of contestation and intervention in East Africa's sexuality politics, viz. the courts, in order to map out and analyse the strengths and weaknesses involved in the pursuit of the battle against homophobia via judicial mechanisms. Through an examination of recent legislation and decided court cases, the study mapped out the contours of a battle that has resonance not simply within the context of the contemporary African situation but well beyond.

An article based on work at STIAS was published in the *African Human Rights Law Journal* in 2015.

Anne Phillips (London School of Economics and Political Science)

The politics of the human

When Anne Phillips applied for the fellowship at STIAS, she had intended to spend the bulk of her time developing an existing project on *The Politics of the Human* (now published by Cambridge University Press, 2015). She had been working on this for some time, focusing on the ways notions of our common humanity figure in resistance to racism, xenophobia, misogyny, and other hatreds of the 'other'; and arguing that some of the ways we deploy the notion of our 'core' humanity run the risk of presenting difference as itself a problem. In the process, they can also encourage us to ignore the very real inequalities attached to difference. Her plan was to extend this work in relation to South African discourses of the human and humanity, looking for example at the notion of *ubuntu*, and at the way ideas of common humanity were expressed in the Truth and Reconciliation Commission.

But in truth she had come to the conclusion, in her preparatory reading prior to arriving at STIAS, that there was already a fascinating South African scholarship on these issues, to which

she would have relatively little to add. In the event, the focus of her work at STIAS was twofold. First, the period of her visit coincided with that of Susanne Lundin and Elmi Muller, who were working on a project on *Future bodies*, and who had organised a conference during her visit on *Global bodies in grey zones: health, hope, biotechnology*. She was inspired by this to return to some issues she had been addressing in her own previous research on *Our bodies, whose property?* (Princeton University Press, 2013); and spent much of her time at STIAS working on notions of exploitation as applied to the global trade in surrogacy services. She gave a paper on this at a conference in Canada in October 2015, which will be published under the title *Exploitation, Commodification, and Equality*, in a forthcoming Rowman and Littlefield collection *Exploitation: from practice to theory* edited by Monique Deveaux and Vida Panitch.

Secondly, she took the opportunity to explore in greater depth the ways tensions of gender and culture are currently being played out in South Africa. Amanda Gouws (Stellenbosch University) organised a one-day workshop on issues of gender, feminism, and culture that brought together scholars from the universities of Stellenbosch, Cape Town, Western Cape and Witwatersrand. This was most illuminating to Phillips. As one outcome of this, she gave an interview to the editor of *Gender Questions*; this will be published, along with responses from four of the other workshop participants, in a forthcoming issue of the journal. She also gathered material for a paper she had given just prior to her STIAS visit at a conference on *Women and legal pluralism*, and rewrote this to include a specific South African case study. This will be published in a forthcoming collection for Oxford University Press, edited by Will Kymlicka and Ruth Rubio Marin.

She says, "My visit then followed a slightly unusual path, for unlike most fellows who have a clearly worked out project that they follow during their visit, I changed direction. Through my engagement with scholars at STIAS, Stellenbosch University and other South African universities, I was enabled to extend existing work and link it to current South African scholarship, and I am deeply grateful for this."

Ernst Conradie (University of the Western Cape)

The malaise of the human condition: social diagnostics, human evolution and theological discourse on the contingency of sin

This STIAS project formed part of a larger project on *Redeeming sin: hamartiology, ecology and social diagnostics*. The underlying question is a broad and highly complex one: what went wrong in evolutionary history? What is 'wrong' need not be only understood in religious or moral terms but also has medical (disease), economic (scarcity), and other connotations (design flaws) that cannot easily be separated from each other. This requires multi-disciplinary reflection which is why the STIAS environment proved to be so helpful.

Conradie observed that answers to this question are never expressed in the form of a single judgement, but provide multifaceted responses to at least five questions, namely what is wrong, where and when has it gone wrong, what was the situation before things went wrong, what can be done about that and what is the prognosis. These responses are best expressed in the form of narratives, typically drawing on classic myths. Departing from an analysis of Paul Ricoeur, Conradie identified, described and contrasted especially three such master narratives, namely the Manichean-Darwinian-capitalist, the Augustinian-Marxist and the Pelagian-liberal versions of the story of what went wrong, each with implications for pedagogy and moral formation. His own interests focused on the (lack of) plausibility of the Augustinian narrative and its core assumption of the contingency of human sin, as expressed in the motto of *posse non peccare*. In order to address this complex set of problems, theological and philosophical perspectives were investigated in conversation with insights emerging from disciplines such as evolutionary biology, sociobiology, animal ethology and the cognitive sciences.

Following progress with a number of essays on this project at STIAS, Conradie has submitted a proposal for a volume of essays entitled *Malaise: essays on redeeming sin amidst food contestation and ecological destruction* for publication in the Fordham University Press series *Groundworks: ecological issues in philosophy and theology*.

Denis-Constant Martin (Sciences Po Bordeaux)

Cape Town harmonies, memory, humour and resilience

This project is a continuation of protracted research on Cape Town's festivals and music which was started in 1993. As a direct result of this research, two books have already been published. In order to complete a new book on choral repertoires, it was necessary to gather complementary information on two of the main organisations participating in singing competitions taking place during Cape Town's new year festivals: the *Kaapse Klopse* (Clubs of the Cape: carnival troupes) and the Malay choirs. Martin had already begun to explore repertoires sung by these ensembles in 2011, within the framework of the GLOBAMUS project (*Musical creation, circulation and identity market in a global context*) he focused on Afrikaans *moppies*, or comic songs, sung both by *Kaapse Klopse* and Malay Choirs, and in 2013 when he focused on *Nederlandsliedjies* sung by Malay choirs. Articles presenting the results of this research were published in French. One of Martin's former students, Armelle Gaulier, had written two master's dissertations on the same repertoires. Gaulier and Martin thought that based on their respective

studies, they could produce a volume in English that would make their work available to the English-speaking community, and especially to the South African readership. The book will not offer a mere translation of what has already been written in French, but an original English text resulting from the fusion and edition of their French works, complemented with the adaptation in English of two articles by Martin on appropriation and memory in musical practices. In addition to providing information on Malay choirs and on the choirs which are part of the *Kaapse Klopse*, information which at the moment is not easily available, as well as on their most original repertoires, Gaulier and Martin intend to show the heuristic interest of combining musicological analysis and socio-political analysis. The main objective of this volume is therefore to construct analytically the relationship between songs – processes of composition and interpretation of the music; organisation and significations of the lyrics – and memory, identity and political attitudes. They therefore conducted detailed musical analyses of a sample of songs, accompanied by opinions, information and assessments provided by singers, coaches and experts, from which they elaborated socio-political interpretations not only of the songs, but of the musical practice of choral

singing as such. The proposed volume has been accepted for publication by African Minds, a publisher based in Somerset West and is provisionally titled: *Cape Town harmonies, memory, humour and resilience*. It will hopefully be released at the end of 2016 or the beginning of 2017.

The fellowship at STIAS allowed Martin to update his information on Malay choirs and *Kaapse Klopse*, especially with respect to their internal organisation. He conducted several interviews with choir leaders and leaders of Malay choirs and *Klopse*, as well as with a lawyer advising some of these organisations. Martin was also able to gather documents on the structure and functioning of these entities and collect DVDs of recent Malay choir competitions. He also attended the finals of the Keep the Dream Malay Choir Board competitions. Although Martin spent quite some time driving around the Cape conurbation to tape interviews, he also took advantage of the tranquillity of his office at STIAS to start preparing the English text of the book. He said: "Apart from providing excellent facilities for working on the book, STIAS as always constituted a most favourable environment for intellectual exchanges. The remarkable group of fellows I was able to interact with during my stay and the seminars which I attended sparked off reflections which will not only bring new ideas to the book I am working on, but will also influence the rest of my work."



Anwar Gambeno singing solo with the Tulips at the finals of the Keep the Dream Malay Choir Board

Michael Blake (Artist-in-residence)

Migrations or The parable of the journey to the south

After focusing almost largely on instrumental music for forty years, Michael Blake turned to the vocal medium – and the choir in particular – during his STIAS artist-in-residency in 2014/15.

The time at STIAS allowed him to research the choral repertoire, in particular that for his chosen medium of 16 solo voices, and to create a 22-minute composition in which he could reference “the whole of choral music”. The concept is akin to a compendium of ‘found’ musics: two pieces from the repertoire of the Banda-Linda (Congo Republic) which is originally for 18 horns and adapts well to 16 solo voices; music from the western choral repertoire, 14th – 20th centuries, and including Robert Carver, Gesualdo, Stravinsky and Ligeti – transformed by musical processes which he developed while at STIAS; and musical material from southern African vocal repertoires such as the Xhosa.

The text is adapted from the first part of Stephanus Muller’s *The journey to the South*, itself an adaptation of Hermann Hesse’s *The journey to the East*, and this is elaborated in repeated fragments in 15 other languages (the remaining ten official South African languages, along with five ‘colonial’ languages).

With so much migration taking place to Europe particularly at the time Blake was composing this work and subsequently – including his own migration between South Africa and Europe – the title was something of a foregone conclusion.

The score will be published by Bardic Edition UK in 2016. The conductors of two choirs specialising in this type of repertoire – in France and in Sweden – have expressed interest in performing this work. Blake is also preparing a second version for four-part choir and pre-recorded tape, in order to make the work available to choirs in general.

Other work done at STIAS included *Shard* (October 2014) which was premiered in Carnegie Hall, New York, with Nicolas Horvath (piano) on 9 January 2015 and *...only the song of the birds* (completed March 2015) premiered in Tallinn, Estonia, Ensemble Resonabilis on 3 December 2015.



Right: Le-Nique Brand and Marietjie Pauw rehearsing Michael Blake’s Five Pieces for Piccolo and Tuba



Benjamin Davy (Technical University of Dortmund)

Ulrike Davy (Bielefeld University)

Understanding southern welfare – social policies in Brazil, India, China and South Africa

The project, brought to STIAS by Benjamin and Ulrike Davy, was at an early stage in the beginning of 2015. The project started out from the tentative assumption that countries of the global south have – over the course of the last 60 or 70 years – followed their own paths of social policies, not just replicated northern concepts of social welfare. Yet, research regarding social policies in the global south is still scarce. The project is meant to add new dimensions to existing research, and Brazil, India, China and South Africa were chosen as the probing grounds for finding out more about social policies in the global south (the BICS countries). During the stay at the STIAS in February and March 2015, the project became more and more elaborate. The focus of the project was specifically oriented towards ideas, perceptions, and beliefs regarding ‘social problems’ of local actors. The main research question was defined as being: What ideas informed the definition of social problems and the choice of social policy instruments since the 1940s (for Brazil: the 1930s)? Moreover, the project was oriented towards three specific research fields: constitutional social rights and values, social security (in particular income security), and land reforms. Finally, the project gained a clear

comparative and theoretical outlook; based on a comparison of the ideas underlying social policies in Brazil, India, China and South Africa (and some other countries), the project is now supposed to move to theory-building with respect to southern welfare.

The stay at STIAS was also used to network with pertinent South African scholars from law, sociology, political science and studies on land reform. Clearly, research on southern welfare needs to draw on the expertise and the experience of scholars with roots in the BICS countries. Additionally, the project benefitted greatly from the advice of other STIAS fellows and their friends who generously shared their views on the characteristics of southern welfare. By the end of 2015, the project was bolstered by a worldwide network of scholars coming from a range of disciplines. A conference at the Center for Interdisciplinary Research (ZiF) in Bielefeld in November 2015 strengthened certain thematic and methodological issues. The decision on the funding of the research group will be made in July 2016. The stay at the STIAS was pivotal for preparing the application.

During his stay at STIAS Ben Davy also wrote and completed a chapter (*Plurale Bodennutzungen und polyrationales Bodeneigentum*) in the volume *Bodenordnung und Landmanagement* of the *Handbuch der Geodäsie* (five volumes, edited by W Freeden and R Rummel).

Hans Lindahl (Tilburg University)

Boundaries and legal authority in a global context

There is widespread agreement that the enormous growth of cross-border human activities increasingly calls into question the regulatory capacities of the territorial state. Yet the broader conceptual and normative significance of these developments remains the object of protracted debate. One of the central conceptual problems consists in establishing how (spatial) boundaries and boundary contestation continue to play a decisive role in making sense of legal orders in a global context, where processes of inclusion and exclusion are no longer exclusively linked to the forms of closure proper to the territorial state. This decentering of boundaries and boundary contestation from the territorial state raises important conceptual normative questions concerning legal authority. What renders authoritative the acts of setting legal boundaries in a global context? Moreover, what are appropriate and effective institutional mechanisms by which such authority can be contested?

The project approaches this set of questions in two stages. The first, deployed in 2015, focuses on human rights and business, asking how the transformation of the boundaries of statehood might contribute to recovering the public and political nature of human rights law beyond the international legal order of territorial states. This question was the object of an international colloquium hosted by STIAS in March 2015, with papers by Upendra Baxi (Warwick), Fleur Johns (New South Wales), Neil Walker (Edinburgh), Larry Catá-Backer (Penn State), Claire Cutler (Victoria), David Bilchitz (Johannesburg), Sheldon Leader (Essex), Radu Mares (Raoul Wallenberg Institute of Human Rights), Daniel Augenstein (Tilburg) and Hans Lindahl. The papers of the colloquium will be published under the title *Global Human Rights and the Boundaries of Statehood*, in the *Indiana Journal of Global Legal Studies* in 2016.

In a second stage, Hans Lindahl and Louise du Toit (Stellenbosch) have convened a range of leading academics, including Abdullah An-Na'im (Emory, confirmation pending), Sofia Näsström (Uppsala), Marcelo Neves (Brazilia), Sundhya Pahuja (Melbourne), Kaarlo Tuori (Helsinki), Louise du Toit (Stellenbosch) and Hans Lindahl, to visit STIAS to reflect on the

broader issues called forth by the project theme. The visits will be spread out during 2016 and 2017. Each of the academics will present a working paper on the topic, to be discussed with the other participants in the project, at least some of whom will participate via the state-of-the-art videoconferencing facilities of STIAS. To foster a discussion that is as open as possible, no plans have been made for a volume of the collected papers. Instead, the working papers will be posted on a blog (www.stias.ac.za/boundaries), as will the films of the discussions to which they give rise. The blog will invite the broader public to comment on both the working papers and the filmed discussions. In due course the academics will publish amended versions of their working paper, acknowledging their participation in this project. Last but not least, each of the academics will contribute selected bibliographical references germane to the project. These will be posted in the blog for consultation by those interested in its topic.

Francis Nyamnjoh (University of Cape Town)

Fiction and reality of mobility in Africa

The aim of this project was to explore how to marry ethnography and fiction in understanding the intricacies, nuance and complexity of African mobility and mobile Africans as frontier beings. The project sought to draw on rich ethnographies and ethnographic fiction depicting mobile Africans and their relationships to the places and people they encounter, to argue that the mobility of Africans is more appropriately studied as a frontier, emotional, relational and social reality. Currently, nationals, citizens and locals are instinctively expected to close ranks and fight off mobile Africans perceived to bode little but inconvenience and savagery. The tendency and practice are to index, incarcerate, regiment and deport. If tolerated, emphasis is on the needs, priorities and convenience of reluctant hosts. The project explored the challenge to scholarship of going beyond academic sources for ethnographies and accounts of how a deep, flexible and nuanced understanding of mobility and interconnections in Africa and by Africans play out in different places and spaces in a world permanently on the move.

During his time at STIAS Nyamnjoh worked principally on two manuscripts: a journal article which was started and

completed at STIAS, and a book which was enriched, fine-tuned and finalised during his stay. In the book *C'est l'homme qui fait l'homme* the idea that human beings are inextricably bound to one another is at the heart of this book about African agency, especially drawing on the African philosophy *ubuntu*, with its roots in human sociality and inclusivity. *Ubuntu's* precepts and workings are severely tested in these times of rapid change and multiple responsibilities. Africans negotiate their social existence between urban and rural life, their continental and transcontinental distances, and all the market forces that now impinge, with relationships and loyalties placed in question. Between ideal and reality, dreams and schemes, how is *ubuntu* actualised, misappropriated and endangered? The book unearths the intrigues and contradictions that go with inclusivity in Africa. Basing his argument on the ideals of trust, conviviality and support embodied in the concept of *ubuntu*, Nyamnjoh demonstrates how the pursuit of personal success and even self-aggrandisement challenges these ideals, thus leading to discord in social relationships. Nyamnjoh uses a popular Ivorian drama with the same title to substantiate life-world realities and more importantly to demonstrate that new forms of expression, from popular drama to fiction, thicken and enrich the ethnographic component in current anthropology.

The paper *Incompleteness: frontier Africa and the currency of conviviality* published in 2015 in the *Journal of Asian and African Studies* makes a case for conviviality as a currency for frontier Africans. It argues that incompleteness is the normal order of things, and that conviviality invites us to celebrate and preserve incompleteness and mitigate the delusions of grandeur that come with ambitions and claims of completeness. Conviviality encourages frontier Africans to reach out, encounter and explore ways of enhancing or complementing themselves with the added possibilities of potency brought their way by the incompleteness of others, never as a ploy to becoming complete, but to make them more efficacious in their relationships and sociality. Frontier Africans and conviviality suggest alternative and complementary modes of influence over and above the current predominant mode of coercive violence and control.

Resurrection plants

Jill Farrant

Jill Farrant (University of Cape Town)

Systems biology studies on plant desiccation tolerance for food security

Drought is the single greatest threat to world agriculture (FAO, 2008) and this is predicted to be increasingly exacerbated by the effects of global climate change. At present only 11,6% (14,2 million ha) of South Africa is suitable for current agricultural practices and data analysis of global warming trends propose that by 2050 South Africa will be a desert (reviewed inter alia by Dai 2011). Indeed, the drought recently experienced, the worst in the recorded history of South Africa, has required the import of six million tons of maize to meet food demands. It is thus becoming imperative that alternative strategies be developed to meet future nutritional requirements in a country that already faces the challenge of maintaining a fragile environment in the face of a growing population. Most plants, and all current crops, are unable to tolerate even slight water deficit for prolonged periods, their default state being to avoid or resist water deficit stress under drought conditions. Worldwide attempts to improve drought resistance in crops have had some success, but under severe drought conditions, resistance fails and crop loss ensues.

There are some 135 species of higher plants (termed resurrection plants), the majority being endemic to southern Africa, that are able to lose 95% of cellular water, remain in the desiccated state for prolonged periods (up to years) and yet resume growth within 24 hours following a rain event. Such 'resurrection plants' are also tolerant of extreme heat and nutrient-poor soils. Over the past 22 years, Jill Farrant has systematically investigated the fundamental mechanisms whereby such plants are able to tolerate these extreme environmental conditions, with the view of introducing such characteristics into crops for improved drought tolerance and ultimately food security for South Africa in the face of climate change. During her period of fellowship at STIAS, Farrant worked on and submitted an application for a DST/NRF SA Research Chair in Systems biology studies on plant desiccation tolerance for food security, which was awarded to her, commencing January 2016. She also spent time working on three papers in the field of plant stress tolerance, two of which were in an advanced stage in the publication process at the time and one of which has subsequently been submitted for publication.



Albert Goldbeter (Université Libre de Bruxelles)

Biochemical oscillations and cellular rhythms: the molecular bases of periodic and chaotic behaviour

The main goal of the 2015 visit to STIAS was to pursue work on the revised edition of the book *Biochemical oscillations and cellular rhythms: the molecular bases of periodic and chaotic behaviour*, to be published — as the first edition in 1996 — by Cambridge University Press. Significant work was done on writing the chapters devoted to the oscillator driving the cell cycle and to circadian clocks. Since the first edition was published some 20 years ago, the field of systems biology has expanded at a rapid pace. Cellular rhythms represent a topic of choice for systems biology and the number of publications pertaining to these oscillatory phenomena has greatly increased. During the time at STIAS Goldbeter had the opportunity of synthesising this material, so as to provide an up-to-date overview of the field. It is anticipated that the manuscript of the revised version will be completed in the course of 2016.

A second goal was to collaborate with Jacky Snoep (Stellenbosch University) on the mechanism of glycolytic oscillations in yeast. These oscillations represent the prototype of periodic behaviour in biochemistry. The goal of this study was to further elucidate the role played by the regulation of the enzyme phosphofructokinase in the origin of the oscillatory phenomenon. On the basis of these results a manuscript is currently in preparation tentatively entitled *The core regulatory mechanism of glycolytic oscillations*.

In addition to the above work two manuscripts were finalised for publication in 2016.

Simon Bekker (Stellenbosch University)

Analysing sub-Saharan African states through a limited access lens

It is rare that a book emerges that makes us, through the uniqueness of its theory, perceive history as we have not seen it before. This is the case with *Violence and social orders*, written by Douglass North, John Joseph Wallis and Barry Weingast and bearing the ambitious subtitle: *A conceptual framework for interpreting recorded human history*.

By using this framework as a lens through which to observe recent changes in the states of sub-Saharan Africa, the advantages of distinguishing between limited access orders — as these states all appear to have — and the open access orders of advanced sustainable democracies of the global north, become apparent. One particular advantage flows from the shift this distinction advocates from development interventions based upon the historical experience of states in the global north to development interventions that are more locally anchored in the experiences of states in the global south.

The primary goal of this STIAS fellowship was to research and to refine this type of argument and subsequently to broadcast its potential significance to both developmental agencies as well as to researchers in the economic and social sciences. Seminars on this research have been presented in Stellenbosch and Paris and an article co-authored with Norman Bromberger (*A shift in Western development agency thinking? The case for second best*) has been submitted for publication.

A close-up portrait of Mary Njeri Kinyanjui, a woman with short, dark hair, smiling warmly. She is wearing a light-colored collared shirt under a teal jacket. The background is a solid blue color. On the left side of the page, there are large, stylized blue quotation marks that frame the text.

“STIAS is an *utu-ubuntu* space for building solidarity in the search for knowledge between the young and old, different disciplines and diverse opinions.”

— Mary Njeri Kinyanjui, University of Nairobi, 2015

Mary Njeri Kinyanjui (University of Nairobi)

Cultural villages as a strategy for planning for a resilient African metropolis

In her study of Nairobi, Kinyanjui found that slums, urbanised villages and self-developed urban fringes constitute the main components of the unplanned or informal settlements in the city. One common attribute of these spaces is the dominance of African logic, norms and values of settlement occupation and development, hence the name African metropolis. The slum locally referred to as *vijiji* or *mtaa ya mabanda* represents the earliest attempts of individuals of African origins with limited low levels of education and income to claim territorial occupation in the city. In the early days this included traders, artisans, retired house boys, or generally people who worked in the informal economy. Today they are occupied by individuals who work in the city with irregular contracts such as watchmen, drivers and workers in transport sector, factory casual workers, cleaners, shop attendants, retirees, traders and artisans and employees in the trade and craft workshops. The self-developed urban fringes genesis was occupying and developing settlement on land sold and distributed by land-buying companies to members. The plots of land are bought by individuals with a cultural logic of owning land as a basis of accumulation and solidarity economic logic of pooling resources and buying property together. Examples include settlements on Thika Road, Kangundo Road and Mlolongo areas in Nairobi. The urbanised villages constitute areas where the settlement is older than the city like the Dagoretti district in Nairobi. One thing these areas have in common is that traders and artisans as well as peasants play an important role as the drivers of social economic activities. These activities include job creation, investment, leisure and distribution of goods and services. Planning these places has been a major challenge to local and international city managers and administrators.

While at STIAS Kinyanjui developed the 'cultural village' concept as a strategy for planning the informal settlements in Nairobi. The cultural villages will incorporate traders and artisans and peasants occupying the African metropolis in Nairobi. The villages will serve as agglomerations of local economic and cultural practices. People will earn livelihoods by engaging in trade, arts, indigenous foods and crafts, sciences and think-tank endeavours. A village school system will advance social and scientific innovations for coping with everyday problems. Through learning and mentoring,

knowledge and information will be transferred to the young generation. In addition, a community hospital will manage the well-being of the people. Social harmony and cohesion in the cultural village will be maintained through self- and group regulation. The cultural village will give the community identity and a sense of belonging.

The cultural village will blend the African traditional institution of trade and artisan work with global urban practices. Despite the fact that these people are drawn from different backgrounds, they are likely to have common bonds. The bonds include family, religion, professional, community or ethnic bonds. It will allow for delving into institutional meaning, logic, norms and values as well as strategies adopted by the traders and artisans in imprinting their livelihoods and habits in Nairobi. The cultural village concept is composed of interacting agents who are inextricably linked to each other and each wanting to negotiate livelihood as individuals and as a community. This concept forms the basis of their actions in forming autonomous communities for harnessing human agency. This is realised through devising rules and regulations, learning and innovation, pricing, production and exchange as well as deploying of surplus.

The logistics of development of the cultural village requires the participation of experts including planners, architects, surveyors, building economists and lawyers. It also requires the participation of plot owners associations, resident associations, tenant associations, building investors, traders, artisans and peasants. The experts can provide support in the street and road layout, quality control and standardisation. The experts should, however, strive to enhance the traders' and artisans' interdependence of each other. They should use their bonds of family and community in the circulation of information and spread of the ideas and encourage the use of local resources so that endogenous development can be realised. They should also endeavour to perpetuate the village culture of *utu-ubuntu* which involves generosity in the sharing of design, technology, innovations, managerial skills as well as knowledge.

The financing of the cultural village can be through individual funding or family, social group, neighbourhood or cooperative funding. This will involve accumulation of savings by family, neighbourhood, social groups, or making investments. Such savings groups have drilled boreholes in Kinoo and provide security in Kahawa Sukari. Individual, family and social group

funds can be supported by foundations and low interest loans to avoid long-term indebtedness. The cultural village will therefore be self-financing and be a base of economic activities, affirming of cultural identity and continuity, community history, solidarity, creativity, governance and inclusivity.

A book manuscript entitled *African markets in Nairobi: the utu-ubuntu business model, 'African metropolis' and cultural villages* has been submitted to African Minds for publication consideration.

Pieter Muysken (Radboud University)

Multilingual ecologies

Languages change and adapt as they exist in the minds and practices of multilingual speakers. This has been Pieter Muysken's research focus for a long time and at STIAS he worked on different research projects in this area, including code-mixing, creole genesis, and heritage languages.

One of these projects concerns mining languages. Based on a general typology of mining languages (Fanagalo from Gauteng and beyond is a prime example of one), Pieter Muysken has been studying multilingual practices in the silver mines of Potosí (Colonial Alto Perú, present day Bolivia). Based on work at STIAS a conference on mining languages is being planned, a first as far as is known, which will also involve South African colleagues.

A second project involves joint work with Kofi Yakpo (University of Hong Kong) on five centuries of multilingualism in the former Dutch colony of Surinam with 14 languages, a situation almost as complex as the one in South Africa. Surinam is tiny, and South Africa is huge, with speaker numbers for many languages in the millions rather than the thousands, as in Surinam. Nonetheless, there are a number of similarities, such as complex processes of mutual adjustment between languages rather than only influences in one direction, the important role of vernacular forms which have not disappeared in the presence of colonial prestige languages, and the presence of languages from Asia such as Bhojpuri. A book *Boundaries and bridges: multilingual ecologies in the Guianas* is nearing completion.

Paul Nugent (University of Edinburgh)

Wine, temperance and South African connectivity c. 1900 to the present

Although wine is often framed within bounded national histories, it is a commodity that is best understood within a global context. This project, which aims to transcend South African exceptionalism, focuses on three levels of connectivity between South Africa and the wider world in the 20th and early 21st centuries. The first is the exchange of scientific knowledge about viticulture and wine-making. The second is the circulation of ideas about quality and taste alongside well-entrenched consumer preferences. The third level is the campaign against the products of the vine championed by a South African temperance coalition that was extremely

well-connected to the international temperance movement. The aim of the project has been to integrate these elements in accounting for bursts of innovation and periods of stasis.

During Nugent's 2015 stay at STIAS he continued to conduct interviews with key players within the industry while working on the archives of Stellenbosch Farmers' Winery (SFW). The main priority has been the production of a book manuscript provisionally entitled *Race, taste and the grape: South African wine and global connectivity*. A chapter was completed which draws on the SFW archives to understand the advertising and marketing strategies of wine companies as they sought to develop a market for wine following the de-racialisation of the liquor laws in 1962. A further chapter dealing with the deregulation of the wine industry, and the effects thereof, up to 2000 was also completed. The final chapter takes in developments in the industry down to the present. In 2015, papers on different aspects of the relationship between race, advertising and consumption were presented at the Afrika-Studie Centrum in Leiden (April), the Association of Wine Economists conference in Mendoza (May), and the Institute for Advanced Study in Princeton (October). A related paper which will be delivered in January 2016 at the University of Florida is being prepared for publication.



Far left: Frank Myburgh, SF Malan and Manie Malan of Alto after the latter won the Burgoyne Trophy three years in succession, 4 June 1932

Left: Advertisement for Lieberstein as it appeared in a daily newspaper

David Takacs (University of California)

Deeply equitable development: water provision and biodiversity offsetting in South Africa

Fulfilling human rights to a clean and healthy environment while sustaining that environment for present and future generations of humans and non-humans is unambiguously worthwhile until a nation tries to achieve these goals simultaneously. South Africa is a world leader as it implements laws and policies that promote human rights, raise citizens' standards of living, and protect the ecological matrix that supports prosperity.

While at STIAS, research was undertaken on two related examples of South Africa's quest to balance these goals with the hope to offer advice on how the nation might continue to develop its ground-breaking legal reforms. One project examined how South Africa is balancing the constitutional right to clean water while preserving the resource for present and future generations of humans and non-humans. The second project was a continuation of an analysis of South Africa's developing biodiversity offsetting policy, which attempts to balance the exigencies of economic development with the need to preserve biodiversity for current and future generations. Both case studies address the urgent question of how developing nations may simultaneously steward vital ecological resources while raising citizens' standard of living.

To date several talks have been given on the STIAS work, three in South Africa and three in the USA.

A manuscript, *South Africa and the human right to water: equity, ecology, and the public trust doctrine* will be published in 2016 by the *Berkeley Journal of International Law*. Work on the comparative study of biodiversity offsetting and the law, which will include South African law and policy, is continuing and the results are expected to be published in 2016 and 2017.

Reiner Klingholz (Berlin Institute for Population and Development)

Wolfgang Lutz (IIASA, Vienna University of Economics and Business)

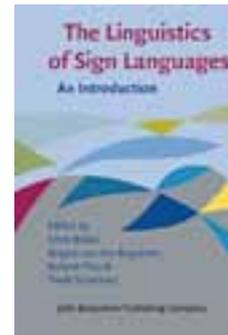
Who survives? Education determines the future of humanity

It's not primarily the economy, nor money that makes the world go round and determines longer-term progress in human well-being. More important than what is in the wallets of the people, is what is in their heads. And what is in the heads is formed and enhanced by education which in turn not only helps to fill the wallets but also improves the health of the person, improves society and the quality of institutions, strengthens resilience and even makes people happier.

But at the beginning of the 21st century humankind is in many respects at the crossroads. While the West and parts of East Asia have achieved remarkable economic success after strong investments in universal education and an end of population growth, much of Western Asia and Africa still combine low education with poverty and high population growth. World population may well increase to over 10 billion depending essentially on the future course of female education. If opponents of female education such as Boko Haram, the Taliban, or Islamic State (IS) win their wars in Africa and Western Asia the world population might even increase to over 12 billion of mostly poor people being very vulnerable, posing serious risks to world security.

A book by Klingholz and Lutz, mainly written during their STIAS fellowship, introduces and argues the view that basic education of broad segments of the population has been and will remain the key driver for socioeconomic development, for the transition to modern democracies and for successfully managing the challenges posed by global environmental change in the 21st century and beyond. An education revolution towards universal education was first triggered by Martin Luther's postulate that every person, including the masses of illiterate farmers, should be able to read the Bible directly without being dependent on church authorities. All previous civilisations, from early Egyptian or Chinese cultures

Learning a sign language is in many ways like learning a spoken language



to ancient Greece and Arabic scholarship, to the great humanists of the 16th century had only been based on small educated elites among largely illiterate societies.

Following the Reformation, compulsory education programmes were established in protestant regions in Germany and Holland, later in Scandinavia, Britain and North America. These programmes prepared the grounds for the Industrial Revolution and were followed by economic success in the more educated countries whereas the less-educated Catholic powers, Spain and Portugal, lost influence and after the end of colonialism became poor and under-developed countries. The US was the first country that through its high school movement went well beyond basic education and by the middle of the 20th century had clearly the best educated population in the world. This was a decisive factor in making the US the uncontested economic and political world leader over the second half of the century. Over the coming decades China, which during the past decades has massively invested in education, may take over this role.

The book *Wer überlebt? Bildung entscheidet über die Zukunft der Menschheit* will be published in February 2016 at Campus in Germany. An English edition is in preparation.

Also based on the fellowship is the following publication by Wolfgang Lutz (*Demographic metabolism: enabling future generations*). This paper develops a theory of social change with predictive power that is based on the mechanisms of generational replacement. It stresses that societies change over time, in part due to forces that affect all ages at the same time, but also to a significant extent through the replacement of generations. New members of society entering adulthood from childhood bring with them new ideas and new modes of behaviour. As they move up in the age pyramid the composition of the population gradually changes.

Anne Baker (University of Amsterdam)

Learning a sign language: the challenge of modality

The study of sign languages contributes to our understanding of the human language faculty. Learning a sign language is in many ways like learning a spoken language, whether you learn it as a child as your first language or as an adult. There are, however, important differences in this acquisition process and these shed light on the impact of modality on that process. In the three months at STIAS, Baker worked specifically on two chapters, one considering the methodologies necessary to consider sign language acquisition, and the other on the development of the use of sign languages. Specifically by doing further analysis of longitudinal recordings of young deaf children new insights were gained into the development of turn-taking. When in conversation it is essential that the addressee sees the signing. Young deaf children need to learn to check if the other is signing and to use strategies to gain attention for their own contributions. Deaf children of deaf adults have learned to look for signing by the age of two and a half. They continue to learn to use strategies such as moving their signing into the visual field of the addressee. At age five they do this well but still do not conform to politeness rules since they will sign close in front of the parent's face.

This work will be reported at the major international conference TISLR in Melbourne in January 2016. Also while at STIAS the manuscript for the book *Linguistics of sign language: an introduction* was completed.

Hans-Dieter Klingemann (WZB Berlin Social Science Center)

Market economy or social welfare policy? The programmatic responses of political parties to the global recession

Political parties are important actors in representative democracy. They are expected to be responsive to the demands of citizens and propose policies to deal with issues on the political agenda. As a rule, political parties present their goals and policy positions to the electorate by issuing programmes for which they seek support in competitive elections. If they participate in government, political parties are assumed to base their policies on governmental propositions. These considerations are core elements of theories of representative democracy.

A severe recession hit most countries around the globe in the aftermath of the financial crisis of 2007/2008. This recession had a strong impact on economies, and as a consequence, on the well-being and political attitudes of citizens. In a situation such as this, it is expected that government and opposition parties develop policies designed to solve or ease the economic and social problems. The recession came as an external shock to most countries and their party systems. The event presented the possibility to study changes in the programmatic behaviour of political parties by comparing programmatic profiles of election programmes issued in the pre- and post-recession elections, a constellation that comes close to a quasi-experimental 'before and after' design.

Political parties are expected to respond to severe issues such as the global recession. In this STIAS project the question posed was whether such a response was visible in the election programmes after the recession had hit a given country. To find out empirically, the election programmes issued by 150 political parties in the pre- and post-recession elections in 30 countries were compared. Programmatic change in two policy areas which were expected to change most was observed. Many observers have predicted a general shift of economic policy toward a greater emphasis on a market economy. In this case, political parties would argue that a market economy provides the best instruments to tackle the negative effects of the recession and turn the economy around. Other experts assumed a general shift toward a greater emphasis on social

welfare politics. In this case, political parties would argue that social welfare policy must be improved to compensate for the negative effects of the global recession. Empirical results support the proposition that across the board political parties have increased their emphasis on a market economy. Levels of emphasis on social welfare policy did not change from the pre- to post-recession elections. Party family membership, the role of parties as government or opposition, the magnitude of the impact of the recession (the country's cumulated output loss), the time distance of the date of the pre-recession election and the start of the recession, and the level of the dependent variable in the pre-recession election were selected to predict the rates of change in the emphasis on a market economy and the emphasis on social welfare policy.

Multivariate regression analysis confirmed the importance of the level of emphasis on a market economy in the pre-recession election, membership of party family, and time distance as predictors of change of emphasis on a market economy. The effect of the level of emphasis on a market economy in the pre-recession election is negative: the higher the level of emphasis on a market economy in the pre-recession election, the lower the rate of change. This is as hypothesised. It is interesting that both 'left' and 'right' party families predict higher rates of change toward a market economy. This was not expected for the 'left' party family. Time distance is negatively related as expected: the closer the time distance of the date of the pre-recession election to the start of the recession, the higher the rate of change. It was surprising that cumulated output loss did not significantly predict an increase of emphasis on a market economy, and, as it turned out, it did not predict an increase in emphasis on social welfare policy either. This finding deserves further attention. The role of parties as government or opposition did not show a significant relation to the rate of change regarding a market economy in the standard regression equation. Considering the interactions of party families and the role of parties as government and opposition, it came as a surprise (again running counter to expectations) that 'left' government parties turned out to be the best predictors of a growing change of emphasis on a market economy.

On average, sizeable changes in emphasis on social welfare policy from the pre- to the post-recession election was not observed. Thus, it does not come as a surprise that most of

the relations between the dependent and the independent variables in the standard multivariate regression were not significant. The two exceptions are the level of emphasis on social welfare policy in the pre-recession election and the parties' membership in the 'left' party family. The effect of the level variable mirrors the one regarding a market economy: the higher the level of emphasis on social welfare policy in the pre-recession election, the lower the rate of change. The effect of 'left' party family membership is as expected. 'Left' party family membership predicts a higher rate of change toward emphasis on social welfare policy. As far as change of emphasis on social welfare policy is concerned, none of the marginal effects reaches the level of significance.

In summary, what was the programmatic response of the political parties to the global recession? Did they increase their emphases on a market economy or on social welfare policy? Plausible arguments have been presented for both positions. Empirical findings offer a clear answer to this question. In their programmatic response after the global recession, the 150 political parties in the 30 countries under study, on average shifted toward emphasis on a market economy as a policy to tackle the problems of the global recession. While occupying a high degree of emphasis in the programmes of the pre- and post-recession elections, the social welfare policy positions did not change as a result of the impact of the global recession. This is a clear indication of the predominance of the political parties' economic frame of reference to programmatically react to the issues related to the global recession.

A full account of the analysis was published in the *Taiwan Journal of Democracy* in 2015.

The analysis is part of the project, *Globalization: the perceptions of the current economic crisis and its impact on support for democracy*, funded by the Swedish Riksbankens Jubileumsfond. It was conceived and concluded at STIAS which hosted Hans-Dieter Klingemann as a fellow in 2013 and 2015.

Talks relating to the general project were given in Berlin and Stellenbosch.

Lessius, *De iustitia et iure*, Parisiis 1643,
and other learned authorities

Nils Jansen (University of Münster)

Understanding non-contractual obligations: unjust enrichment and the law of torts in comparative and historical perspective

In this STIAS project research aimed at offering a principled comparative exposition of the law of non-contractual obligations (i.e. obligations arising independently of a contract) was pursued. The principal focus of the research was to unveil, from a comparative, historical, and analytic perspective, common ideas, principles, and rules that structure the legal relations between private individuals without a contractual agreement. The project was based on the assumption that it is not sufficient simply to describe existing rules in this field, as there are as yet no common European rules. The intention is rather to contribute to the re-emergence of a common European, or even global, private law.

The historical perspective proved to be particularly useful in researching this field of the law. Many concepts, rules, and even institutions in this field of the law are largely dysfunctional today. They were coined many hundreds, or even thousands, of years ago and therefore continue to be informed by the cultural background of bygone societies and shaped by purposes no longer representative of the modern society. Nevertheless, as so often in the law, those concepts, rules, and institutions passed from one generation of lawyers to the next without much reflection and have become part of modern European legal systems. It is high time to fundamentally rethink and re-conceive the modern law in view of its contemporary purposes and policies. All non-contractual obligations have a common basis: the idea to protect basic rights through damages claims and restitution.

All these findings will be published in a major research article in the (2016) 216 *Archiv für die civilistische Praxis: Gesetzliche Schuldverhältnisse. Eine historische Strukturanalyse (Gesetzliche Schuldverhältnisse* being the translation of 'non-contractual obligations'). A second article that focuses on the law of unjustified enrichment, commonly regarded as one of the two main elements of non-contractual obligations, will appear in the (2016) 20 *Edinburgh Law Review*: 'Farewell to unjustified enrichment?'



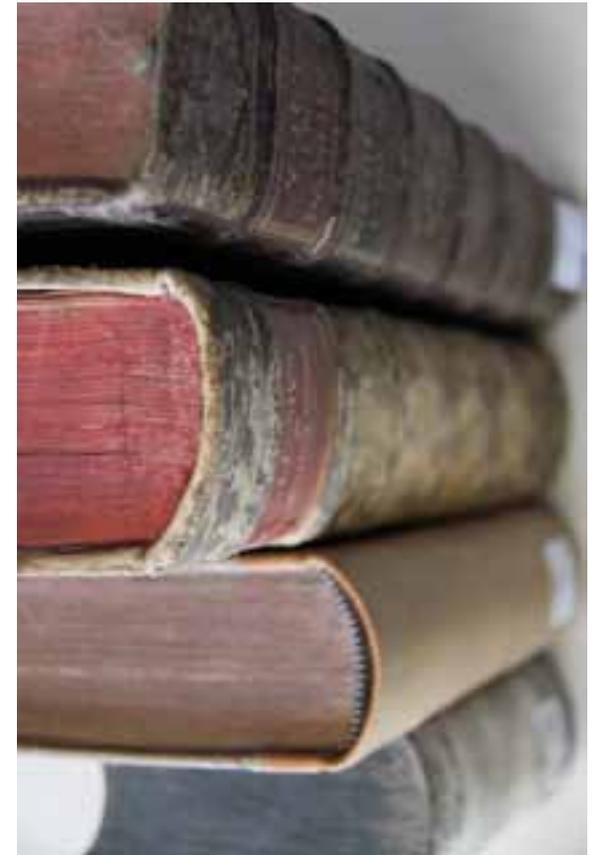
Carlos Ibanez (Karolinska Institute, National University of Singapore)

Growth factor receptor signaling and biology in nervous system development and metabolic regulation

Obesity is a medical condition defined as the excessive accumulation of fat that presents a risk to health. Worldwide obesity has doubled since 1980. In 2008, over half a billion people were obese. Health hazards associated with obesity include heart disease, diabetes and cancer. Lifestyle modifications are the most straightforward way to control weight. However, a large portion of the population may not be able to rely on this modality alone. The development of anti-obesity therapeutics represents a major unmet medical need.

Research at STIAS was focused on the development of novel anti-obesity therapeutics based on suppression of ALK7 function. ALK7 is a receptor for a subset of growth factors from the TGF- β superfamily that is highly expressed in rodent and human adipose tissue and which recent research by Ibanez's group has demonstrated to be involved in the control of fat accumulation in response to the diet. A draft proposal was written at STIAS describing a novel strategy for the identification of small molecules targeting the ALK7 receptor. The novelty of the strategy lies in its focus on the transmembrane domain of ALK7 as a target for modulation of receptor activity. The proposal will be used to seek funding from suitable governmental institutions and industrial organisations.

In addition to the above, work performed at STIAS resulted in a review article on the current understanding of the biology of the GDNF family of growth factors with special emphasis on their function and therapeutic value for neuropsychiatric diseases. This is an invited contribution for a special issue



of *Neurobiology of Disease*, a highly regarded journal in the field of neuroscience which is expected to appear in press during 2016. Furthermore a second article was written on experimental research performed at Ibanez's laboratory at the National University of Singapore. This article describes research aimed at understanding the mechanism of action of the p75 neurotrophin receptor. This molecule is expressed on neurons and glial cells and functions as a receptor for a family of growth factors known as the neurotrophins, as well as other ligands. The p75 receptor has been implicated in injury responses in the nervous system and is thought to contribute to neural damage in neurodegenerative conditions such as stroke and Alzheimer's disease. Using mutant mice and tissue culture experiments, the results of this study indicate that, both in vitro and in vivo, neuronal death induced by the p75 receptor requires the death domain and a conserved transmembrane cysteine residue, supporting the physiological relevance of death domain signalling by dimers of p75 in the central nervous system.



“The encounter with South Africa and the political transformations that are taking place in this country as I write has forced me to rethink and rework my project – which is essentially a political theoretical one – in a direction that it would not have taken elsewhere. It has helped me to develop and nuance my approach, and hopefully made the whole project more relevant also outside of my own field.”

— Mats Rosengren, Uppsala University, 2015

Mats Rosengren (Uppsala University)

On social meaning – Ernst Cassirer, Cornelius Castoriadis and philosophical-rhetorical anthropology

In rhetorical theory, the question of how meaning is produced has traditionally been dealt with in terms of the intentions of the orator to influence her or his audience through speech. Today, it seems necessary to complement and to a certain extent rework this traditional notion. The theories of generation of meaning in typical rhetorical situations are no longer sufficient for the contemporary discipline of rhetoric. Thus, this project proposes an expansion of rhetorical meaning to the more comprehensive concept of social meaning, as it may be construed within a certain strand of philosophical anthropology. Drawing on the philosophy of symbolic forms (Cassirer) and the idea of a magma of social imaginary significations (Castoriadis), inquiry is made into specific spaces of human creation – such as architecture and city-planning. The main focus is to deepen our understanding of how social meaning is produced and may be understood.

The time at STIAS was very fruitful, full of surprises and events that significantly influenced research on this project. The intention was to pursue the development of a rhetorical theory of knowledge and knowledge production that Rosengren had been working on over the last ten years, ('the doxology') into a theory of what he called 'social meaning' and of its institutionalisations and transformations. His primary examples would be architecture, buildings and city planning.

Rosengren comments "This project was profoundly influenced and transformed – to the better I think and hope – by the inspiring and very cross-disciplinary discussions with the fellows at seminars, workshops, luncheons."

Outputs thus far are:

- A major article, written at STIAS: *A philosophical-anthropological case for Cassirer in rhetoric*, together with Erik Bengtson, *Rhetorica – A Journal of the History of Rhetoric*, submitted in July 2015 and accepted for publication in January 2016.
- A collaboration and one joint application to STINT/NRF with Stephanus Muller (Stellenbosch University),

regarding embodiment of social meaning in Uppsala and Stellenbosch, with special focus on the role of soundscape.

- A conference paper on the conflictual relations between autonomy and *ubuntu*, to be presented at the international conference, Presumed Autonomy, in Stockholm during May 2016.
- The soon to be completed manuscript, profoundly reworked and transformed during the stay at STIAS, of the book *Exercises in social meaning and Philosophical Rhetorical Anthropology*.

Oscar Hemer (Malmö University)

Writing across borders/In praise of impurity

The project embarked on at STIAS was formulated in response to the longer-term STIAS theme *Crossing borders*. It is part of an experimental attempt at merging academic and literary practices in new forms that are tentatively called ethnographic fictions for lack of a better term. This ambition emanates from previous research on literature's role in the transition processes of South Africa and Argentina (*Fiction and truth in transition: writing the present past in South Africa and Argentina*, 2012). In this project genre borders are literally transgressed, exploring a form that is supposedly congenial with the theme of the investigation: the affirmation of *impurity* or contamination, for which South Africa, and particularly the Western Cape, is a very apposite case.

The work done at STIAS is a combination of literary reviewing and reflection with testing of writing methods. An experimental format emerged in the process: a text with two corresponding layers, addressing the topical issue of xenophobia in a South African context, which literally exploded during Hemer's stay at STIAS, and doing so in a form that sought to be inventive and interrogative by itself.

One of the main premises for the interrogation is the assumption that the regularly resurging nationalism, identity politics and xenophobia, in Europe as in South Africa and as, possibly, everywhere, can be framed by the discourse of *Purity-Impurity*, as outlined and analysed by British anthropologist Mary Douglas in *Purity and Danger* (1966). Douglas theorises purity and impurity in terms of instantiation

and disruption of a shared symbolic order. Simply put, purity conceals the preservation of that order, whereas all that threatens the social equilibrium is encoded as impurity. The close reading of Douglas, combined with analyses of 'apartheid and complicity' (Sanders 2002) and the previous outbursts of xenophobic violence (Adam and Moodley 2013), runs in parallel with a fictionalised journal from Stellenbosch. The text, *Stellenbosch stomp/impurity and danger*, was completed after Hemer's return to Malmö, and presented as a paper at the conference of the International Association for Media and Communication Research in Montreal in July 2015. The paper, which forms the first part of the project, is published in Malmö University Electronic Publishing. The second part, preliminarily called *Cape calypso*, also based on the stay at STIAS but possibly in a different format, is to be finalised in 2016. Contact has been made with a prospective publisher to present the complete project in one volume as a monograph in 2017.

Another outcome of the STIAS fellowship was a joint application, with STIAS fellow Francis Nyamnjoh, for a call for Swedish/South African research collaboration later in the year. The joint project, which included a number of Swedish and South African scholars, was called *Impurity and incompleteness: towards a politics of conviviality in times of distress*. Although it was shortlisted by the Swedish reviewing committee, it unfortunately did not make it to the final ten. The applicants are however intent on continuing their collaboration by other means.

Ulf Gerdtham (Lund University)

Understanding clinical quality of care in public primary health care facilities in South Africa

In collaboration with the Department of Economics at Stellenbosch University, a standardised (SP) patient research methodology to examine quality of primary health care in South Africa was piloted at the end of October/beginning of November 2015. This involves the use of a covert actor or field worker who presents a healthcare worker (e.g. doctor or nurse) with a set of typical symptoms (as contained in a script) that should predictably map to a set of probes, a diagnosis and treatment or next steps. Comparing the clinical treatment received by the SP to clinical practice and protocols enables researchers to create a clinical quality score at facility level and to observe variation in treatment across individual patients. The standardised patient research methodology has been validated as offering a safe and accurate research method to examine quality of health care from the process perspective (Das et al. 2015).

The pilot entailed 39 standardised patient interactions across five public primary healthcare facilities in the Western Cape. The pilot included scripts for four important public health areas: contraception, tuberculosis (TB), child diarrhoea and pregnancy testing.

The training of SPs took place over four working days in October 2015. During the first two days, the SPs were exposed to the study methodology, ethics training and overall project sensitisation. By the second day, SPs start to study their scripts. The last two days were used for role play and refinement in the learning and presentation of the script. This was an intensive process with attention given to recall, accurate presentation of the symptoms and consistency. All SP interactions were completed by the end of November. During December 2016, a pilot debrief meeting took place with the Department of Health. The collected data has since been captured and preliminary feedback on the data and individual facility performance was provided to the Western Cape Department of Health at the beginning of February 2016. Application for permission to expand the research to a larger study (18 facilities in the Eastern Cape and 18 facilities in the Western Cape) has been submitted. Funding for the larger study has also been received from the National Research Foundation and a further funding application has been submitted to a joint call for funding by the Medical Research Council South Africa and the Swedish Research Council for Health, Working Life and Welfare Working Life (Forte).

Jane Carruthers (University of South Africa, Stellenbosch University)

The history of science in South Africa's national parks

Over the course of the 20th century, natural scientists working in protected areas of South Africa – national parks and other nature reserves – have conducted interesting and sometimes groundbreaking research. However, despite academic journal articles and books about the evidence-based environmental and ecological knowledge that has been generated around conservation science, academic historians have been slower to evaluate this research in the context of the overarching history of science in southern Africa (and indeed internationally), nor placed it within the framing socio-political and economic environment. Having authored a book on the history of the Kruger National Park and published articles on other national parks and aspects of the development of conservation biology, Carruthers spent time at STIAS continuing with writing and research on a monograph that details the trajectory of national park conservation science in all research areas and in all national parks in South Africa over the 20th century. This will hopefully fill the gap in the historiography and contribute to narrowing the very evident division in South Africa between what, in 1959, CP Snow referred to as 'The two cultures'.

Considerable progress was made during the three-month period at STIAS on this project, as well as on a substantial collaborative project dealing with the conservation and study of the Cape flora that has been accepted for publication in the *Transactions of the Royal Society of South Africa* in 2016. The book manuscript was completed at the end of 2015 and is now being edited prior to being submitted for publication.



Training of field workers for standardised patient interactions

Vidyanand Nanjundiah

Vidyanand Nanjundiah (Centre for Human Genetics, Bangalore)

Dichotomies in biology and the origin of life problem

When two fundamentally distinct explanations are offered for the same phenomenon, the expectation is that in the long run one of them will endure and the other will be discarded. The history of biology shows otherwise. It contains many examples of seemingly irreconcilable viewpoints, or dichotomies, that have ended up in a sort of peaceful coexistence – the epigenetic and preformationist theories of development, for instance. One reason is that living systems have been shaped by historical contingencies, and different routes have led to similar outcomes. Another is that apparently contradictory explanations can be valid at different levels of biological organisation. The present project aims to explore a range of dichotomies in biology including, eventually, the one that depends on whether the origin of life problem is viewed as the origin of reproduction or as the origin of metabolism. During Nanjundiah's stay in STIAS it was possible to follow up two themes.

- JBS Haldane and Ernst Mayr, two of the founders of evolutionary theory, differed on the appropriate mathematical models to describe changes in the genetic composition of a population during evolution. Haldane and others believed that there was merit in studying genes (i.e. loci) one at a time, whereas Mayr argued that the genes of an organism had to be viewed as a whole. The two views are analogous to the 'single particle' and 'collective' levels of description used in physics. The evidence points to confusion over what mathematical models were expected to achieve as a significant reason behind the dispute. This work was carried out in collaboration with Veena Rao and has resulted in a publication in *History and philosophy of the life sciences* to be published in 2016.
- Explanations in the natural sciences depend on physical-chemical processes. Biology has a special feature: because of the genetic code, it deals with the exchange of (semantic) information too. On the face of it, there is a dichotomy between how we view the chemistry-based enzyme reactions that guide metabolism and the code-based processes that are responsible for enzyme synthesis itself.

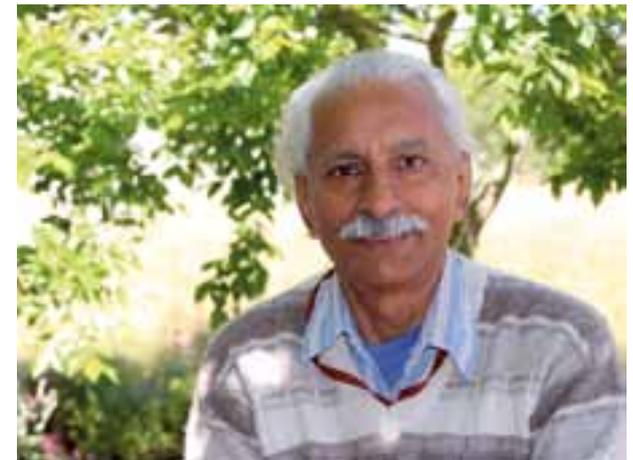
The arbitrariness of the genetic code was believed to set the seal on its informational role. But in order to function as a conveyor of information, it depends on 'hardware' made up of chemical molecules. It has been argued that at least in part, the genetic code is the evolutionary outcome of affinities and bindings based on standard chemical principles. Besides, it turns out that the code may not be that arbitrary after all. This part of the work was developed into a public lecture. Comments made then and at other times by colleagues at STIAS have helped in bringing the work to a stage preparatory to publication.

Anne Mager (University of Cape Town)

Traditional leadership, democracy and development in the rural Eastern Cape: a study of futures past

Following the advent of democracy in South Africa in 1994, the African National Congress government has systematically rehabilitated institutions of traditional leadership and increased the powers of chiefs. Advocacy research has sought to demonstrate that this strategy and the behaviour of traditional leaders runs counter to the values of the South African constitution of 1995 but there is no indication on the part of the ruling party and its government that the strategy to resuscitate chiefly rule in the rural areas of South Africa will be abandoned. The question then, is not whether chiefly rule runs counter to the constitution but how it can be accommodated within a constitutional democracy. This problem is not unique to South Africa.

Very little of the literature on this issue has been informed by historical inquiry. By exploring traditional leadership and economic change from the mid-19th century to the present, and by honing in on a particular region of the Eastern Cape, this project seeks to develop a close understanding of changing rural power relations and the complexities of rural lives and livelihoods over time. The project seeks to foreground a community which in 1852 was stripped of its chieftaincy by the colonial governor and which remained for some 150 years without a recognised chief. People associating themselves with this community were scattered across an area that was named 'western Thembuland' by Bantustan leader Kaiser Daliwonga Matanzima. It was in 'western Thembuland' that the



nerve-edges of the frontier mentality of colonial South Africa were most acutely exposed for over a century and the area remains a frontier zone of encounter in the postcolonial era.

Concerned with people, politics and place, this study seeks to trace the history of a 'banned' chieftaincy and to tell the story of the struggle for its re-establishment, formal recognition and relevance in the unceasing restlessness of an ongoing frontier zone. It is a struggle that has run parallel, and some would argue, counter to that for democracy. Aspects of this process have been the subject of commissions of inquiry, including those of Traditional Leadership Disputes and Land Claims, and have entered provincial and national courts. This struggle is concerned with the legacy of the past, contemporary governance, access to land, systems of tenure and the rehabilitation of identities.

The STIAS fellowship enabled the production of a draft of a chapter of the book on this project. Provisionally titled *Traditional leadership, democracy and development in the rural Eastern Cape: a study of futures past* it will be co-written with Phiko Jeff Velelo. The manuscript for the book will be completed in 2017.

Jan Bengtsson (Swedish University of Agricultural Sciences)

Regina Lindborg (Stockholm University)

Biodiversity and ecosystem services in grassland systems – current knowledge and future directions

Agriculture is currently the major land use at a global scale and covers between 30 and 40 per cent of the world's terrestrial area, of which a large proportion is grasslands and rangelands. As the human population increases, the need to produce more food has both increased land-use intensity and the areal extent of the agricultural land during the last century. Grasslands are currently undergoing extensive land-use changes worldwide. In particular, they are transformed as a consequence of agricultural intensification, urbanisation, and land abandonment.

Extensively managed grassland systems are a key feature in many agricultural production systems, delivering not only meat or milk from livestock, but are also recognised for their ecological, socioeconomic and cultural importance. If appropriately managed, such grasslands may increase the multifunctionality of rural landscapes as they harbour extraordinary high biodiversity and at the same time provide numerous other benefits for humans (ecosystem services), such as food production, water supply and cultural values.

In this project a comprehensive overview was undertaken of the ecosystem services which were generated in different types of grassland, with a focus on southern African and northern European grasslands. It was shown that besides being globally recognised for their high biodiversity, grasslands can supply additional services highly demanded from society, for example, water supply and flow regulation, carbon storage, erosion control, climate mitigation, cultural values, pollination and biological control of agricultural pests. It is argued that food security research and policy should give higher priority to how grasslands and rangelands can be managed for fodder and meat production as well as for the other ecosystem services. By integrating these grasslands into agricultural production systems locally and regionally, it is possible to increase their potential to contribute to functional landscapes and to food security and sustainable livelihoods at the global scale.

A book chapter and two articles are expected to be published in 2016.

Shireen Hassim (University of the Witwatersrand)

Contingency and uncertainty: working with and against the state in South Africa

This project asks the question: under what circumstances, with what political resources, and under what kinds of assumptions are women able to make claims on the state to address gender inequalities? Much of the global scholarship on women's capacity to effect systemic change begins from a premise that institutions can be designed to facilitate women's ability to impact on the programme and priorities of the state; that is, it focuses on forms of endogenous intervention to draw women – as a relatively marginalised political force – into processes of state decision-making. However, the existing bodies of scholarship, especially the newly-emerging field of feminist institutionalism, tend to downplay both the complicated nature of institutions and the specific forms of agency that may shape relationships between citizens and the state in particular historical contexts. Instead, the focus is largely on institutional design and predictive model-building. This project seeks to bring a proper historical focus to questions of political and policy change. It proposes to take seriously the multiplicity of engagements – not always positive or progressive – between women citizens and the state, and the relationships between projects for social justice broadly conceived (including revolutionary change) and specific forms of advocacy addressed to/through the state.

During the time at STIAS Hassim worked on a paper addressing the ways in which laws and the constitution can act as institutional resources for advancing the idea of gender equality. She also wrote a paper entitled *The radical future of South Africa's past: gender equality and constitution-making in South Africa* which was presented in October 2015 at a workshop on Gender and Constitutions held at the European University Institute. A revised version of the paper will be published in a book emerging out of the conference, edited by Helen Irving and Ruth Rubio Marin.

The work at STIAS also germinated a slightly different approach to thinking about the relationship between tradition and modernity in institutions. A first take of this was presented at Yale University, where Hassim was invited guest professor

in women and gender studies. The paper, entitled *In South Africa, for instance: thinking about gender and institutions from the south*, provoked considerable debate and Hassim has been encouraged to work on it for publication during the course of the year.

Simon Blackburn (University of Cambridge)

A convergence between expressivism and pragmatism

The project envisaged while working at STIAS was the convergence between two philosophical traditions. One is pragmatism, which numbers many distinguished philosophers of the late 19th and 20th centuries among its adherents. The other is expressivism, a less well-known, somewhat niche position in the philosophy of language, of which Blackburn is one of the main contemporary exponents. It is widely supposed that there is a natural affinity between the two families, but Blackburn hopes to cement something of a marriage in a book, of which the work done at STIAS will be a valuable part. In the event it was particularly pleasing to complete a paper on that affinity that he had originally presented at the British Academy in the summer of 2015, bringing together a number of disconnected threads in the story.

During his time at STIAS, Blackburn was also able to further explore the public face of pragmatism. He learned, for instance, that John Dewey had been a significant influence on educational theory in South Africa, and the Italian probabilist, Bruno de Finetti had himself an unfortunate enthusiasm for the value of pragmatism to the regime of Benito Mussolini. As the history of South Africa illustrates, ideologies and philosophies have a more significant impact on public life than is often realised, and this was highlighted by talking with colleagues in other disciplines at STIAS.

Anna-Mia Ekström's WelTel PMTCT project in Eldoret, Kenya



Desta Mebratu (United Nations Environment Programme)

Green economy and Africa's leapfrogging opportunity

The research on green economy and Africa's leapfrogging opportunity was conceptualised with the purpose of developing a coherent conceptual framework for green economy as the social transformation of the 21st century and elaborating Africa's unique leapfrogging opportunities to green economy. During the stay at STIAS the principal economic, social and environmental drivers of the impending social transformation were consolidated; the major factors that favour Africa's leapfrogging to green economy were elaborated; and the key elements of the structural transformation that are required for Africa's transition to green economy were identified. Towards the end of the fellowship, the conceptual and operational framework developed and based on the above was presented at a fellows' seminar held at STIAS and to a graduate class of the Sustainability Institute of Stellenbosch University.

The framework developed at STIAS was subsequently shared widely with the relevant colleagues at UNEP and its key conclusions and recommendations have been fed into the pertinent green economy projects that are implemented by UNEP. Furthermore, a number of presentations were made at conferences in South Africa and abroad.

The need for transformational change at the global level has been broadly recognised by the international community through the adoption of Agenda 2030 on sustainable development goals in September 2015 and the Paris Agreement on climate change in December 2015. But, the major challenge for the coming decade is ensuring their effective implementation across the regions. The research work that started during the time at STIAS will continue in 2016 with the purpose of publishing the outputs and conclusions for wider dissemination. It will also be used as a basis to develop and carry out a trans-disciplinary applied research programme aimed at developing an implementation model that contributes to Africa's leapfrogging to an inclusive and green economy.

Kenneth Reid (University of Edinburgh)

Sisters-in-law: Scotland, South Africa, and the law of property

Perched, inconveniently, at opposite ends of the globe, Scotland and South Africa are nonetheless 'sisters-in-law' in the sense that their systems of private law are uncannily close. For in both countries private law is founded on the Civil or Roman law – in South Africa on the Roman-Dutch law brought to the Cape by the Dutch colonists in 1652, in Scotland on an indigenous re-working of Roman law in the light of the writings of the jurists of the *ius commune* including those of the Dutch universities. And in both countries this Civilian foundation has come to be partly overlaid by the English Common Law, brought to Scotland by the Union with England in 1707 and to South Africa by the British occupation at the end of the 18th century. The result, in both cases, was to create a system of law in which the common law was mixed with the civil law, and importantly, mixed in a way which proved to be remarkably similar. In no area of law are the similarities stronger than in the law of property.

Building on existing work, this project seeks to explore those similarities. Its immediate aim is to create a narrative of Scottish property law which is set against a South African template; its longer-term objective is to enhance cooperation between private-law scholars in Scotland and South Africa and to promote the cross-fertilisation of ideas. The main purpose of the visit to STIAS was to collect materials on South African law, to engage in conversations with others in the field, and to gather thoughts, but it was also possible to begin work on a paper, since completed, on the ownership of body parts. The research carried out at STIAS will contribute to various writing projects scheduled for the next few years.

Anna-Mia Ekström (Karolinska Institute)

HIV prevention and treatment from policy to implementation

Anna-Mia Ekström's research aims towards increased access to HIV treatment and prevention, in particular, prevention of mother to child transmission (PMTCT) of HIV in sub-Saharan Africa. The recent decision by countries in East Africa to roll out PMTCT Option B+, that is, initiating all HIV-infected pregnant women on anti-retroviral treatment for life (and not only during pregnancy and breast-feeding) regardless of their immune status, has both obvious benefits but also several challenges.

In addition to protecting the infant from HIV infections, the benefits include reduced transmission risk to sexual partners and reduced morbidity and mortality of the women. On the other hand, there are also large challenges related to health systems weaknesses and staff shortages limiting the capacity to monitor and support the women. Social stigma and difficulties of partner disclosure of HIV status hinder many women to adhere to the HIV treatment putting them at risk of drug resistance, infecting their infants and their partners, and of premature death. A study protocol for a PMTCT Kenyan study has recently been submitted which entails an *m-health* intervention to remind mothers to bring their infants back for follow-up and HIV testing, and in the second PMTCT project, a paper on the potential is close to submission.

STIAS FELLOWS AND PROJECTS LIST

STIAS fellows

Abegaz, Berhanu

African Academy of Sciences,
Nairobi
Some thoughts and reflections about chemistry in Africa

Baker, Anne

University of Amsterdam
Learning a sign language: the challenge of modality

Beilharz, Peter

Curtin University
Modernity and modernism in everyday life – South Africa and Australia in the 20th century

Bekker, Simon

Stellenbosch University
Analysing sub-Saharan African states through a limited access lens (Crossing borders theme project)

Bengtsson, Jan

Swedish University of Agricultural Sciences
Biodiversity and ecosystem services in grassland systems (Sustainable agro-ecosystems theme project)
(with Regina Lindborg)

Blackburn, Simon

University of Cambridge
A convergence between expressivism and pragmatism

Blake, Michael

Composer – Artist-in-residence
Voices

Botha, Rudie

Utrecht Institute of Linguistics,
Stellenbosch University
How did Homo sapiens become Homo docens? On the evolution of social learning and teaching during the palaeolithic (Being human today theme project)
(project leader:
Peter Gärdenfors)

Carruthers, Jane

University of South Africa
The history of science in South Africa's national parks (Sustainable agro-ecosystems theme project)

Coetzee, JM

University of Adelaide
51 poets: an anthology of world poetry

Colletta, Nat

New College of Florida
A comparative study of donor and state policy and operational approaches to addressing forced displacement in the Horn of Africa

Conradie, Ernst

University of the Western Cape
The malaise of the human condition: social diagnostics, human evolution and theological discourse on the contingency of 'sin'

Davy, Benjamin

Technical University of Dortmund
Understanding southern welfare – a cross-boundary agenda for the BICS countries (with Ulrike Davy)

Davy, Ulrike

Bielefeld University
Understanding southern welfare – a cross-boundary agenda for the BICS countries (with Benjamin Davy)

De Wet, Erika

University of Pretoria
The modern practice of intervention by invitation and its implications for the prohibition of the use of force

Dubow, Saul

Queen Mary University of London
Science in South Africa – a synoptic history

Dumont, Guy

University of British Columbia
Toward reducing infant mortality via smart and low-cost pulse oximetry (Health in transition theme project)

Duncan, Norman

University of Pretoria
The effects of race (Being human today theme project)

Ekert, Artur

University of Oxford
The nature of randomness and fundamental physical limits of secrecy (project leader)

Ekström, Anna-Mia

Karolinska Institute
HIV prevention and treatment: from policy to implementation (Health in transition theme project)

Ezeh, Alex

African Population and Health Research Center
Urbanisation and health in Africa (Health in transition theme project)

Farrant, Jill

University of Cape Town
Systems biology studies on plant desiccation tolerance for food security

Fombad, Charles

University of Pretoria
African constitutionalism: comparative perspectives (The future of democracy theme project)

Froneman, Johan

Justice: Constitutional Court of South Africa
The (constitutional) problem of property (The future of democracy theme project)

Fugard, Athol

(Permanent visiting fellow)
Playwright, novelist, actor, and director – Artist-in-residence
Dry remains – the forensic examination of the moral content of a life

Gärdenfors, Peter

Lund University
How did Homo sapiens become Homo docens? On the evolution of social learning and teaching during the palaeolithic (Being human today theme project)
(project leader)

Gerdtham, Ulf

Lund University
Making primary health care work for the poor (Health in transition theme project)

Goldbeter, Albert

Université Libre de Bruxelles
Biochemical oscillations and cellular rhythms: the molecular bases of periodic and chaotic behaviour

Hassim, Shireen

University of the Witwatersrand
Contingency and uncertainty: working with and against the state in South Africa (Being human today theme project)

Hemer, Oscar

Malmö University
Writing across borders/In praise of impurity (Crossing borders theme project)

Hjerm, Mikael

Umeå University
The effects of race (Being human today theme project)

Högberg, Anders

(Young scholar)
Linneaus University
How did Homo sapiens become Homo docens? On the evolution of social learning and teaching during the palaeolithic (Being human today theme project) (project leader: Peter Gärdenfors)

Ibanez, Carlos

Karolinska Institute
New approaches to anti-obesity therapeutics (Health in transition theme project)

Jablonski, Nina

(Permanent visiting fellow)
Penn State University
The effects of race (Being human today theme project)
(co-convenor)

Jansen, Nils

University of Münster
Understanding non-contractual obligations: unjust enrichment and the law of torts in comparative and historical perspective

Kaganof, Aryan

Filmmaker, novelist, poet and fine artist – Artist-in-residence
The effects of race (Being human today theme project)

Kinyanjui, Mary

University of Nairobi
Ubuntu: the African indigenous market concept and the evolving metropolis in Kenya

Klingemann, Hans-Dieter

WZB Berlin Social Science Center
The impact of the global recession on party policy preferences (The future of democracy theme project)

Klingholz, Reiner

Berlin Institute for Population and Development
It's the education, stupid! – Martin Luther's unfinished business (Being human today theme project)
(with Wolfgang Lutz)

Larsson, Lars

Lund University
How did Homo sapiens become Homo docens? On the evolution of social learning and teaching during the palaeolithic (Being human today theme project) (project leader: Peter Gärdenfors)

LeBaron, Michelle

University of British Columbia
The theory and practice of social transformation through the arts (Being human today theme project)

Lindahl, Hans

Tilburg University
Global human rights law and the boundaries of statehood (Crossing borders theme project)

Lindborg, Regina

Stockholm University
Biodiversity and ecosystem services in grassland systems (Sustainable agro-ecosystems theme project) (with Jan Bengtsson)

Lombard, Marlize

University of Johannesburg
How did Homo sapiens become Homo docens? On the evolution of social learning and teaching during the palaeolithic (Being human today theme project) (project leader: Peter Gärdenfors)

Lundin, Susanne

Lund University
Global bodies: health, hope, biotechnology (Health in transition theme project) (with Elmi Muller)

Lutz, Wolfgang

IIASA, Vienna University of Economics and Business
It's the education, stupid! – Martin Luther's unfinished business (Being human today theme project) (with Reiner Klingholz)

Mager, Anne

University of Cape Town
Traditional leadership, democracy and development in the rural eastern Cape: a study of futures past (Being human today theme project)

Manganyi, Chabani

University of Pretoria
The effects of race (Being human today theme project)

Maré, Gerhard

University of KwaZulu-Natal
The effects of race (Being human today theme project) (co-convenor)

Markowski, Radoslaw

Warsaw School of Social Sciences and Humanities
Democracy at the crossroads: normative, performance and legitimacy changes in contemporary democracies during the crisis (The future of democracy theme project)

Martin, Denis-Constant

Sciences Po Bordeaux
Cape Town's creole songs – Nederlandsliedjies and moppies

Mebratu, Desta

United Nations Environment Programme, Nairobi
The transition to green economy: Africa's leapfrogging opportunity (Sustainable agro-ecosystems theme project)

Mignolo, Walter

Duke University
Decolonial thoughts

Muller, Elmi

University of Cape Town
Global bodies: health, hope, biotechnology (Health in transition theme project) (with Susanne Lundin)

Muysken, Pieter

Radboud University
Multilingual ecologies (Crossing borders theme project)

Nanjundiah, Vidyandand

Centre for Human Genetics, Bangalore
Dichotomies in biology and the origin of life problem

Ndebele, Njabulo

(Permanent visiting fellow) University of Cape Town
The effects of race (Being human today theme project)

Nugent, Paul

University of Edinburgh
Wine, temperance and South African connectivity c.1900 to the present

Nyamnjoh, Francis

University of Cape Town
Fiction and reality of mobility in Africa (Crossing borders theme project)

Olofsson, Berit

Stockholm University
Hypervalent iodine reagents as green reagents in organic synthesis

Oloka-Onyango, Joe

Makerere University
Battling homophobia in the bid to protect East Africa's sexual minorities: a socio-legal analysis (Being human today theme project)

Persson, Mikael

Chalmers University of Technology
South African – Swedish effort on pre-hospital diagnostics of stroke and traumatic injuries (Health in transition theme project)

Pettersson, Lars

KTH Royal Institute of Technology
Challenges and opportunities for the transport sector

Phillips, Anne

London School of Economics
The politics of the human

Pityana, Barney

College of the Transfiguration
The effects of race (Being human today theme project)

Reid, Kenneth

University of Edinburgh
Sisters-in-law: Scotland, South Africa, and the law of property

Renner, Renato

ETH Zürich
The nature of randomness and fundamental physical limits of secrecy (project leader: Artur Ekert)

Rosengren, Mats

Uppsala University
On social meaning – Ernst Cassirer, Cornelius Castoriadis and philosophical rhetorical anthropology

Santha, Miklos

Université Paris Diderot – Paris 7
The nature of randomness and fundamental physical limits of secrecy (project leader: Artur Ekert)

Soudien, Crain

University of Cape Town
The effects of race (Being human today theme project)

Takacs, David

University of California
Deeply equitable development: water provision and biodiversity offsetting in South Africa (Sustainable agro-ecosystems theme project)

Therborn, Göran

University of Cambridge
The effects of race (Being human today theme project)

Van Marle, Karin

University of Pretoria
The becoming of post-apartheid jurisprudence: towards a minor jurisprudence of generosity

Vidick, Thomas

California Institute of Technology
The nature of randomness and fundamental physical limits of secrecy (project leader: Artur Ekert)

Webster, Edward

University of the Witwatersrand
Labour after globalisation: new forms of organisation, new sources of power

Visiting scholars**Bergendahl, Margareta**

KTH – Royal Institute of Technology
Innovation for prosperity: realising innovation opportunities in sub-Saharan Africa (with Pontus Braunerhjelm)

Berman, Kim

University of Johannesburg
The theory and practice of social transformation through the arts (Being human today theme project)

Braunerhjelm, Pontus

KTH – Royal Institute of Technology
Innovation for prosperity: realising innovation opportunities in sub-Saharan Africa (with Margareta Bergendahl)

Cohen, Cynthia

Brandeis University
The theory and practice of social transformation through the arts (Being human today theme project)

Driver, Dorothy

University of Adelaide
South African literature after the South African Truth and Reconciliation Commission

Erasmus, Zimitri

University of the Witwatersrand
The effects of race (Being human today theme project)

Magak, Kitche

Maseno University
The theory and practice of social transformation through the arts (Being human today theme project)

Mellor, Hugh

University of Cambridge
Acting on stage

Supski, Sian

Monash University
Modernity and modernism in everyday life – South Africa and Australia in the 20th century

STIAS LECTURE SERIES

17 February

Reiner Klingholz (Berlin Institute for Population and Development)
Humanity after growth

10 March

Anne Phillips (London School of Economics)
The politics of the human

14 April

Francis Nyamnjoh (University of Cape Town)
Incompleteness: frontier Africa and the currency of conviviality

15 September

Shireen Hassim (University of the Witwatersrand)
"We are here to claim our rights". A historical perspective on concepts of gender equality in South African politics.

13 October

Artur Ekert (University of Oxford, National University of Singapore)
The ultimate physical limits of privacy

12 November

Vidyanand Nanjundiah (Centre for Human Genetics, Bangalore)
To what extent is biology an autonomous science?



STIAS SEMINARS

22 January

Berit Olofsson
iHype – hypervalent iodine to save the environment

29 January

Simon Bekker
Introducing a limited and open access lens as a way of thinking about modern societies

3 February

Reiner Klingholz and Wolfgang Lutz
It's education, stupid! Martin Luther's unfinished revolution

5 February

Peter Gärdenfors and group
How did Homo sapiens become Homo docens? On the evolution of teaching

12 February

Nils Jansen
Legal thinking in common-law worlds

19 February

Jane Carruthers
'Wilding the farm or farming the wild'? The evolution of game ranching in southern Africa, 1960s to the present

26 February

Ulrike and Ben Davy
Hans Kelsen's law journal in dark times. The Zeitschrift für öffentliches Recht from 1933 through 1945.

5 March

Susanne Lundin and Elmi Muller
Future bodies – preventing organ trafficking – focusing on solutions to the organ shortage

10 March

Jill Farrant
A systems biology approach to understanding the mechanisms of vegetative desiccation tolerance

17 March

Jan Bengtsson and Regina Lindborg
Grasslands – more important ecosystem service providers than you might think

19 March

Hans Lindahl
Law and world: elements for a phenomenology of emergent global legal orders

24 March

Mikael Persson
Saving the brain: diagnosing stroke and brain traumas in a pre-hospital setting

26 March

Michael Blake
Composing outside the 'tradition': creating an indigenous South African art music

1 April

Guy Dumont
Reducing maternal and infant mortality via smart and low-cost pulse oximetry

9 April

Kenneth Reid
Sisters-in-law: Scotland, South Africa, and private law

16 April

Denis-Constant Martin
Musical appropriation, creolisation and self-assertive creation: the moppies (comic songs) of Cape Town

23 April

Oscar Hemer
Writing across borders/In praise of impurity

28 April

JM Coetzee
Exchanges on truth, fiction and psychotherapy

30 April

Joe Oloka-Onyango
Lonely battling homophobia in Ugandan courtrooms: from classroom to praxis

5 May

Radek Markowski
Democracy at the crossroads: normative, performance and legitimacy changes in contemporary democracies during (and after?) the crisis

7 May

Alex Ezeh
A decade and half of health surveillance in urban informal settlements in Nairobi, Kenya: emerging results and their implications for advancing the global health agenda

12 May

Mary Njeri Kinyanjui
Ubuntu in African indigenous market places in Nairobi: an alternative business model for the 'African metropolis'

14 May

Mats Rosengren
Doxa, rhetoric, social meaning

19 May

Desti Mebratu
Green economy and Africa's leapfrogging opportunity



STIAS SEMINARS continued



21 May

David Takacs

Deeply equitable development: water provision and biodiversity offsetting in South Africa

26 May

Anne Mager

'Fighting ubukhosi': the history of a chieftaincy dis-established by the colonial government in 1852 and reinstated by the ANC-led government in 2003

28 May

Hans-Dieter Klingemann
The impact of the global recession on party policy preferences

2 June

Erika de Wet
The modern practice of intervention by invitation in Africa and its implications for the prohibition of the use of force

4 June

Nat Colletta

Violent conflict and forced displacement in the Horn of Africa. Government and donor policies and programmes in search of durable solutions

23 July

Njabulo Ndebele and members of *The effects of race group Reflections on race and racism*

30 July

Göran Therborn
Matters of life and death: the dynamics of vital and other inequalities

6 August

Karin van Marle
Post-1994 jurisprudence and South African coming-of-age stories

13 August

Lars Pettersson
The black gold: the stuff that changed the world

20 August

Walter Mignolo
Decoloniality after decolonisation, dewesternisation after the cold war

27 August

Pieter Muysken
Language in the mines: the Potosí silver mountain

3 September

Johan Froneman
Property: constitutional obstacle or key?

8 September

Athol Fugard
Signed by Athol Fugard: reflections on a writing life

10 September

Hugh Mellor
Acting on stage

17 September

Antjie Krog
Synapse/mede-wete: philosophy, cliché and the confinements of language

22 September

Pontus Braunerhjelm and Margareta Bergendahl
An innovation policy framework – understanding how ideas lead to growth and prosperity: developing innovation capacity

1 October

Ernst Conradie
Where have things gone awry in evolutionary history? Statements on the exercise of (social) diagnostics

6 October

Carlos Ibanez
New approaches to anti-obesity therapeutics

8 October

Sian Supski and Peter Beilharz
Finding Ivan Vladislavić – writing the city

15 October

Anne Baker
Is learning a sign language different?

22 October

Renato Renner
How deterministic are the laws of quantum physics?

29 October

Ulf Gerdtham
Health inequality: an art of measuring when you don't know what and how

5 November

Saul Dubow
From Smuts to Mandela: South Africa and the problem of the Commonwealth

12 November

Albert Goldbeter
Life is a web of rhythms

19 November

Simon Blackburn
Varieties of pragmatism and realism

26 November

Michelle LeBaron and group
The theory and practice of social transformation through the arts

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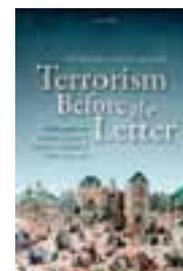
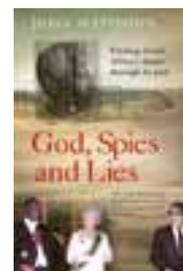
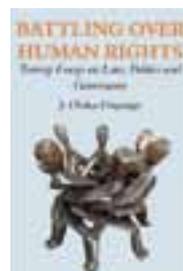
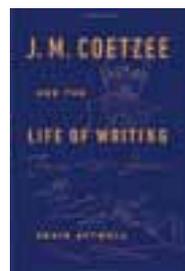
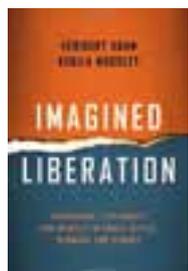
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FUNDING AND GOVERNANCE

STIAS, a Section 21 company since May 2007, is governed by a Board of Directors. The STIAS Board of Directors meets biannually (in 2015 it met on 11 March and 6 November).

The Director of STIAS is responsible for the development of the STIAS research programme. He is assisted in this task by the Academic Advisory Board and by an international panel of experts which includes former STIAS fellows. Since 2014 the Academic Advisory Board meets once a year (in the year under review the meeting took place on 12 and 13 March). The STIAS Fellowship and Research Programme Committee meets weekly during STIAS semesters and its members assist the Director in giving structure to the STIAS research programme.

Board of Directors

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Kåre Bremer (former Rector, Stockholm University)

Cheryl de la Rey (Vice-Chancellor and Principal, University of Pretoria)

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Hendrik Geyer (Director of STIAS)

Christof Heyns (University of Pretoria and United Nations special rapporteur on extrajudicial, summary or arbitrary executions)

Bernard Lategan (STIAS founding Director)

Mosibudi Mangena (former South African Minister of Science and Technology)

Göran Sandberg (Executive Director: Knut and Alice Wallenberg Foundation)

Raenette Taljaard (University of Cape Town and former Member of Parliament)

STIAS company members

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Hendrik Geyer (Director of STIAS)

Fritz Hahne (former Director of the African Institute for Mathematical Sciences)

Jan-Hendrik Hofmeyr (Centre for Studies in Complexity, Stellenbosch University)

Bernard Lategan (STIAS founding Director)

Joachim Nettelbeck (Wissenschaftskolleg, Berlin)

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Laetitia van Dyk (Stellenbosch University Business School)

André van der Walt (SA Research Chair in Property Law, Stellenbosch University)

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Ahmed Bawa (Vice-Chancellor and Principal, Durban University of Technology)

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Bernard Lategan (STIAS founding Director)

Louise Viljoen (Department of Afrikaans and Dutch, Stellenbosch University)

STIAS Society of Fellows

A STIAS Society of Fellows was established in 2010. Peter Weingart, former director of the Zentrum für interdisziplinäre Forschung (ZiF), Bielefeld, serves as its President. The Society is kept informed about STIAS matters and it also serves as a source for STIAS proposals and for reviewing proposals under consideration.

Statement of income and expenditure for the year ended 31 December 2015

| Notes | 31 December 2015 R | 31 December 2014 R |
|---|-----------------------|-----------------------|
| Income: Conference facilities | 7 845 004 | 8 192 214 |
| Other income | 37 417 931 | 27 686 005 |
| <i>Donations</i> | | |
| – Daimler Fund | – | – |
| – Trellis Charitable Trust | 2 000 000 | – |
| – Donald Gordon Foundation | 850 000 | 850 000 |
| – Riksbankens Jubileumsfonds | 6 276 265 | 2 989 963 |
| – Stellenbosch University: contribution to operating cost | – | 2 500 000 |
| – Transfer from STIAS Trust | 6 824 075 | 6 824 075 |
| – Marianne & Marcus Wallenberg Foundation | 12 255 008 | 7 503 801 |
| – Knut & Alice Wallenberg Foundation | 6 824 075 | 6 824 075 |
| National Research Foundation | – | – |
| Tax provision recovered | 2 151 931 | – |
| Rental income | 182 025 | 173 630 |
| Other income | 49 593 | – |
| Foreign exchange gain | 4 958 | 20 460 |
| Expenses | 26 598 563 | 24 249 345 |
| Advertising | 12 092 | 18 138 |
| Audit fees | 32 655 | 30 806 |
| Books | 2 478 | 18 039 |
| Bursaries: postgraduate | 2 975 000 | 1 191 000 |
| Bursaries: undergraduate | – | 75 000 |
| Catering: conference facilities | 6 616 327 | 4 766 826 |
| Consultation | 273 123 | 79 940 |
| Consumables | 257 258 | 249 393 |
| Courses | 3 600 | 1 200 |
| Depreciation | 112 521 | 106 501 |
| Entertainment | 125 769 | 93 924 |
| Foreign exchange loss | 45 844 | 5 007 |
| General office expenses | 28 217 | 13 942 |
| Insurance | – | – |
| Internet | 22 379 | 24 410 |
| Maintenance of equipment | 225 754 | 58 072 |
| Municipal services | – | – |
| Postage | 27 074 | 40 042 |
| Rental of equipment | (1 590) | 3 900 |
| Security services | 114 593 | 214 346 |
| Services | 2 657 892 | 3 291 335 |
| Smaller assets | 40 248 | 84 533 |
| Staff remuneration and stipends for fellows | 6 555 471 | 6 731 861 |
| Stationery and printing | 232 396 | 379 111 |
| Telephone | 159 659 | 173 650 |
| Travel and accommodation | 5 907 293 | 6 427 354 |
| Workshops | 172 512 | 171 016 |
| Operating surplus | 18 664 372 | 11 628 874 |
| Finance income | 3 871 355 | 3 081 645 |
| Tax expense | – | (1 162 054) |
| Surplus for the year after tax | 22 535 727 | 13 548 464 |

Notes to the financial statement of STIAS for the year ended 31 December 2015

1. An amount of R34 120 376,69 was received from the Knut & Alice Wallenberg Foundation during 2013. This amount was donated for utilisation over a five-year period. As a result, the income will be recognised over a period of five years, with the unspent amount recorded as income received in advance under creditors.

2. Services include rent paid to Stellenbosch University, electricity, water, property tax etc.



Ms F Majiet

Director of Financial Services, Stellenbosch University

DIRECTOR AND STAFF



FACILITIES

STIAS is situated on a part of the historic Mostertsdrift, one of the first wine farms in the Stellenbosch area dating back to 1691. The property was bought by Stellenbosch University in 1996 and made available to STIAS by the University in 2001. The old Cape Victorian manor house, wine cellar and outbuildings are situated on 2,6 hectare of parkland. The manor house was restored and rebuilt in 2002 to serve as the STIAS headquarters. Its library is used by researchers and academics for small seminars and workshops. In 2003 the outside of the wine cellar was restored, but the inside was redesigned and refitted to be used as a modern research facility. SACEMA, the South African Centre for Epidemiological

Modelling and Analysis, a Centre of Excellence supported by the Department of Science and Technology, is the present occupant of the cellar. During 2015 STIAS commenced with the refurbishing of the stable building at Mostertsdrift which will be completed in 2016. The latter will primarily accommodate the recently established Stellenbosch University Centre of Complex Systems in Transition.

With the opening of the Wallenberg Research Centre in 2007, STIAS acquired one of the most modern facilities specially designed for advanced research. The centre houses up to 20 researchers at a time in spacious and well-equipped

surroundings in a private wing of the building, with adequate seminar facilities and state-of-the-art equipment. It also provides a home to the National Institute for Theoretical Physics (NITheP) in its south wing. The conference and workshop facilities at the Wallenberg Research Centre, associated with quality service, provide a premier venue for conferences and workshops in the Western Cape.

In August 2014 Stellenbosch University and STIAS signed a 99-year lease agreement for the use of the facilities at Mostertsdrift by STIAS.

ACKNOWLEDGEMENTS

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