

AI as Author (2020–23)

SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TÜRKİYE (TÜBİTAK) 2232 GRANT

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Team

Dr Imke van Heerden, Recipient of the TÜBİTAK 2232 International Fellowship for Outstanding Researchers & Visiting Assistant Professor, Koç University: **Principal Investigator**, 2020–2023. *To King's College London, UK*

Dr Anil Bas, Assistant Professor, Marmara University: **Senior Researcher**, 2020–2023. *To Bournemouth University, UK*

Çağdaş Duman, PhD Student, Boğaziçi University: **Researcher**, 2020–2023. *To Hacettepe University, Türkiye*

M. Onat Topal, MA Student, Middle East Technical University: **Researcher**, 2020–2021. *To University of Oxford, UK*

Awards

First Prize (University Level). *Culture and Tourism Technologies Competition*, TEKNOFEST, 2021.

Best Presentation Award. 4th *IEEE International Conference on Computer and Applications*, 2022.

TÜBİTAK (Scientific and Technological Research Council of Türkiye) 2250 Graduate Performance Scholarship, 2022; 2023.

Mobility

Visiting Scholars, School for Data Science and Computational Thinking, Stellenbosch University, South Africa, 1–29 July 2022.

Publications

Books

Van Heerden, Imke, with Anil Bas and Etienne van Heerden. *Silwerwit in die soontoe: Afrikaans se eerste KI-gedigte*. [Silverwhite into the Distance: The First AI Poetry in Afrikaans.] De Kelders: Naledi Publishers, 2023.

Journal Articles

Van Heerden, Imke, Çağdaş Duman, and Anil Bas. “Performing the Post-Anthropocene: AI – When a Robot Writes a Play.” *TDR: The Drama Review*, 67(4), pp. 104–120, 2023. doi.org/10.1017/S1054204323000448

Van Heerden, Imke, and Anil Bas. “AI as Author: Bridging the Gap Between Machine Learning and Literary Theory.” *Journal of Artificial Intelligence Research*, 71, pp. 175–189, 2021. doi.org/10.1613/jair.1.12593

Topal, M. Onat, Imke van Heerden, and Anil Bas. “Use of Artificial Intelligence in Legal Technologies.” *Exchanges: The Interdisciplinary Research Journal*, 8(3), pp. 35–44, 2021. doi.org/10.31273/eirj.v8i3.788

Topal, M. Onat, Imke van Heerden, and Anil Bas. “Doğal Dil İşleme ve Yapay Zekanın Hukuk Dünyasına Etkisi.” [“The Impact of Natural Language Processing and Artificial Intelligence on the Legal World.”] *İktisat ve Toplum Dergisi [Journal of Economics and Society]*, 130, pp. 57–63, 2021.

Conference Papers

Van Heerden, Imke, and Çağdaş Duman. "Recoding Authorship: Astro Teller's *Exegesis*." Abstract. In *Proc. Disruptive Imaginations: Joint Annual Conference of the Science Fiction Research Association and the German Association for Research in the Fantastic*, p. 48, Technische Universität Dresden, Germany, 2023.

Bas, Anil, M. Onat Topal, Çağdaş Duman, and Imke van Heerden. "A Brief History of Deep Learning-Based Text Generation." In *Proc. 4th IEEE International Conference on Computer and Applications*, pp. 100–103, British University in Egypt, Egypt, 2022.

Van Heerden, Imke, and Anil Bas. "Poetry Machines: Co-Creative Writing with Artificial Intelligence." Abstract. In *Proc. 1st International Humanities – Society – Identity Congress*, p. 5, University of Warsaw, Poland, 2022.

Duman, Çağdaş, Imke van Heerden, and Anil Bas. "Artificial Intelligence and Authorship Through a Literary Lens." Abstract. In *Proc. Postdigital Art and Culture, EMERGE 2022 International Conference: Digital Society Now*, pp. 64–65, University of Belgrade in association with University of Vienna and American University of Paris, Serbia, 2022.

Duman, Çağdaş, Imke van Heerden, and Anil Bas. "Android Actors and Artificial Authors: Re-Imagining Theatre in the Algorithmic Age." Abstract. In *Proc. 23rd Congress of the International Comparative Literature Association: Re-Imagining Literatures of the World*, p. 485, Tbilisi State University, Georgia, 2022.

Gee, Maxine, Imke van Heerden, and Anil Bas. "A Meeting: AI-Assisted Screenplay Generation." Abstract. In *Proc. Practice Based/Led Working Group, 14th Screenwriting Research Network International Conference: Globalizing Screenwriting*, University of Vienna, Austria, 2022.

Van Heerden, Imke, and Anil Bas. "AfriKI: Machine-in-the-Loop Afrikaans Poetry Generation." In *Proc. Workshop on Bridging Human–Computer Interaction and NLP, 16th Conference of the European Chapter of the Association for Computational Linguistics*, pp. 74–80, Ukraine, 2021.

Van Heerden, Imke, and Anil Bas. "Towards Figurative Language Generation in Afrikaans." Abstract. In *Proc. Workshop on Research in Computational Typology and Multilingual NLP, Annual Conference of the North American Chapter of the Association for Computational Linguistics*, p. 10, Mexico, 2021.

Duman, Çağdaş, Imke van Heerden, and Anil Bas. "Binary Selves, Endless Becomings: Datafication and Emancipation in AI – *When a Robot Writes a Play*." Abstract. In *Proc. 25th Annual Digital Research in Humanities and Arts Conference: Digital Matters*, p. 72, Humboldt University Berlin in association with Free University Berlin, Germany, 2021.

Topal, M. Onat, Anil Bas, and Imke van Heerden. "Exploring Transformers in Natural Language Generation: GPT, BERT and XLNet." In *Proc. International Conference on Interdisciplinary Applications of Artificial Intelligence*, pp. 18–20, Yalova University, Türkiye, 2021.

Creative Work

Van Heerden, Imke. "Afrikaans se eerste KI-gedigte." ["Afrikaans's First AI Poems."] *LitNet*, 2022.

Van Heerden, Imke with Anil Bas and Etienne van Heerden. "Afrikaans se eerste KI-gedigte." ["Afrikaans's First AI Poems."] *Ons Klyntjii*, Year 125, pp. 52–56, 2021.

Newsletters

Van Heerden, Imke. "Summary of 'AfriKI: Machine-in-the-Loop Afrikaans Poetry Generation'." In *Recent Developments in Computational Typology & Multilingual Natural Language Processing*, Issue 11, 13 Apr 2021. Edited by Pranav A, Ekaterina Vylomova, Eleanor Chodroff, Tiago Pimentel, and Ryan Cotterell. ACL Special Interest Group on Typology.

Presentations

Conference Presentations (Non-Archival)

Duman, Çağdaş, and Imke van Heerden. “Can You Imagine Seeing Your Blind Spot?': Astro Teller's *Exegesis* as an Allegory of AI Authorship.” In *AI Imaginaries: Artificial Intelligence in Literature*, *American Comparative Literature Association Annual Meeting*, National Taiwan Normal University, Taiwan, 16 Jun 2022.

Van Heerden, Imke, and Anil Bas. “On the Evaluation of Generated Poetry.” In *Workshop on Evaluation and Comparison of NLP Systems, Annual Conference on Empirical Methods in Natural Language Processing*, Dominican Republic, 10 Nov 2021. View on YouTube: tinyurl.com/evalAIpoetry

Van Heerden, Imke, and Anil Bas. “AfriKI: Machine-in-the-Loop Afrikaans Poetry Generation.” In *Workshop on African Natural Language Processing, 16th Conference of the European Chapter of the Association for Computational Linguistics*, Ukraine, 19 Apr 2021. View on YouTube: tinyurl.com/AfrikaansNLG

Competition Presentations

Topal, M. Onat, Çağdaş Duman, and Imke van Heerden. “TRaveler: Yapay Zeka ile Yenilikçi Kültürel Tanıtım.” [“TRaveler: Innovative Cultural Promotion with Artificial Intelligence.”] In *TEKNOFEST Culture and Tourism Technologies Competition*, Türkiye, 21–26 Sep 2021. Awarded First Prize.

Invited Talks

Van Heerden, Imke, Menno van Zaanen, Tom Dreyer, and Bibi Slippers. “KI as skrywer.” [“AI as Author.”] In *Toyota Stellenbosch University Word Festival*, South Africa, 10 Oct 2023.

Van Heerden, Imke. “AfriKI: Kompers en kreatiwiteit.” [“AfriKI: Computers and Creativity.”] In *Veldsoirée* in association with Amazwi South African Museum of Literature, South Africa, 22 Sep 2023. View on YouTube: tinyurl.com/komperkreatiwiteit

Van Heerden, Imke et al. “Met apologie en dank (PEN Afrikaans-voorlesings).” [“With Apologies and Thanks (PEN Afrikaans Poetry Readings).”] In *12th Annual Garden of Poets Festival*, Breytenbach Cultural Centre, South Africa, 16 Sep 2023. View on YouTube: tinyurl.com/SilwerwitVoorlesing

Van Heerden, Imke. “Making Strange: Co-Creating Afrikaans Poetry with a Boutique Language Model.” In *Digital Humanities Colloquium Series*, South African Centre for Digital Language Resources (SADiLaR), South Africa, 12 Apr 2023. View on YouTube: tinyurl.com/sadilar

Van Heerden, Imke. “AfriKI: Afrikaans Poetry Generation with Artificial Intelligence.” In *Fourth Industrial Revolution Seminar Series*, Department of Languages, Cultural Studies and Applied Linguistics, University of Johannesburg, South Africa, 27 Jul 2022. View on YouTube: tinyurl.com/LectureAfriKI

Van Heerden, Imke, Anil Bas, and Çağdaş Duman. “AI Meets Literature: Challenges and Opportunities.” In *Literary Dialogues Lecture Series*, English Language and Literature Department, Istanbul Bilgi University, Türkiye, 31 May 2022.

Bas, Anil, and Harun Aksaya. “Dijital Dünyanın Mimarı Olmak.” [“Becoming an Architect of the Digital World.”] In *eTwinning Career Clubs* (co-funded by Erasmus+, the European Programme for Education, Training, Youth and Sport), Türkiye, 16 Feb 2021. View on YouTube: tinyurl.com/eTwinningBas

Interviews

Van Zyl, Johan. Newspaper Interview with Imke van Heerden. “Gedigte deur ’n masjien laat Afrikaans surrealisties dans.” [“Afrikaans Dances Surrealistically in Poems by a Machine.”] *Rapport* [Report], p. 15, 19 Feb 2023. Link.

Kotze, Salomé. Radio Interview with Imke van Heerden. *LeesD!T* [Read !t], Life FM, 10 Feb 2023.

Oosthuizen, Jean. Digital Magazine Quotation of Imke van Heerden et al. “Kunsmatige intelligensie: Kan ’n bot die Hertzogprys wen?” [“Artificial Intelligence: Could a Bot Win the Hertzog Prize?”] *LitNet*, 13 Jan 2023. Link.

Lombaard, Sonnette. Magazine Interview with Imke van Heerden. “Robotdigkuns.” [“Robot Poetry.”] *Taalgenoot* [Language Companion], pp. 62–65, Spring 2022. Link.

Rademeyer, Ronelle. Television Interview with Imke van Heerden. “Rekenaar wat kan dig?” [“A Computer Composing Poetry?”] *Kletskompas* [Chat Compass] Episode 738, Network TV, 9 Jun 2022. Link.

Ray, Tiernan. Tech News Quotation of Imke van Heerden, Anil Bas et al. “AI still writes lousy poetry: Machine-generated poetry doesn’t show much thought, but it’s getting good enough to receive favorable nods from human readers.” *ZDNET*, 3 Jun 2021. Link.

Johnson, Gareth. Podcast Interview with M. Onat Topal. “A Conversation with ... M. Onat Topal.” *The Exchanges Discourse*, University of Warwick Institute of Advanced Study, 1 Jun 2021. Link to Apple Podcasts; link to Spotify.

Theron, Nadine. Television Interview with Imke van Heerden. “Mens en masjien dig saam.” [“Human and Machine Compose Poetry Together.”] *eNuus* [eNews], eNCA – News Channel Africa, 20 Apr 2021. Link.

Silwerwit in die soontoe (Naledi Publishers, 2023)

Select Book Reviews and Discussions (Afrikaans; Dutch)

Harmse, Natasha. Article. *Klyntji* (Digital Magazine), 7 Nov 2023. Link.

Editors. Video. *Neerlandistiek* (Digital Magazine), 25 Oct 2023. Link.

Petrack, Nadine. Article. *Ink* (Digital Newspaper), 11 Oct 2023. Link.

Cronjé, Anouk. Article. *Die Burger*, *Beeld*, and *Volksblad* (Newspapers), p. 8, 18 Sep 2023. Link.

Bennett, Nini. Review. *Rapport* (Newspaper), p. 14, 16 Apr 2023. Link.

Diergaardt, Jeanette. Review. *NTV Blitsfokus* (Television), Episode 59, 12 Apr 2023. Link.

Van Wynsberge, Jessica. Article. *Samespraak* (University of South Africa Literary Forum), 12 Apr 2023. Link.

Roux, Alwyn. Review. *LitNet* (Digital Magazine), 6 Apr 2023. Link.

Moll, Mellet. Review. *Versindaba* (Digital Magazine), 4 Apr 2023. Link.

Kombuis, Koos. Review. *LitNet* (Digital Magazine), 28 Mar 2023. Link.

Hugo, Daniel. Review. *Die Burger*, *Beeld*, and *Volksblad* (Newspapers), p. 11, 27 Mar 2023. Link.

Greyling, Franci. Lemma. *Literêre terme en teorieë* (Afrikaans and Dutch Literary Dictionary), Feb 2023. Link.