Acceptance speech, September 4 2023, Tilburg – Sabina Leonelli

It is a tremendous honor to be standing here today and receive this honorary doctorate from the University of Tilburg. I want to start by thanking the university leadership and the colleagues who nominated me and worked to make this possible. I also want to thank my wonderful colleagues and students at the University of Exeter and elsewhere in the world, whose humanity and ingenuity always provides crucial inspiration and motivation; my friends and family, particularly my husband Michel Durinx and my children Luna and Leonardo (who is sitting here); and certainly not least, Dutch academia as a whole, which back in 2002 welcomed me as a foreign PhD student and provided me with a fantastic environment to grow and develop as a scholar I am delighted with this opportunity to strengthen my existing connection with Dutch research institutions. To make this even more significant, my ex-PhD supervisors Hans Radder and Henk de Regt are actually here today, and I want to thank them for being such incredible role models and mentors, and for the insight and kindness they bestowed upon me ever since we met.

I want to add a few words about the broader context of my work, and its relationship to the research and teaching agenda that Tilburg has courageously set itself for the coming years. It is trite to say that we live in an age of profound transformation – at the political, social, technological and environmental levels – and that this undoubtedly affects academic life and scholarship. What I think is notable about this moment is how the interconnections between threads woven over the last two centuries of human history, and particularly the history of science and technology, have become so apparent. It is no longer possible to discuss the dramatic effects of climate change without critically examining socio-economic failures and the expanding inequities and divides of our globalized societies. Nor is it feasible to debate environmental damage and loss of biodiversity without also considering the tragic effects that human-created chemical and plastic pollution have had on biological processes and life forms, as instantiated by evident changes in human metabolism and the rise of anti-microbial resistance. Moreover, what is now widely viewed as the triumph of generative Artificial Intelligence, including the much-discussed large-language models, builds on the massive datafication of human interactions with the environment which took off in the age of discovery – a feat of information extraction tightly linked to the exercise of colonial power, which reflects both the promise and the danger of technological control over nature.

I am convinced that confronting these interconnections is the key towards human survival and wellbeing over the coming years, and that a crucial step on that path is growing our awareness of the role that technological developments emerging from all scientific domains may play in highly diverse and unequal societies.

I am just now back from a research trip to Ghana, where local scientists are taking advantage of novel computing technologies and wide-ranging engagement with knowledgeable farmers in order to investigate varieties of crops and produce novel data that can be consulted and used by like-minded researchers all over the world. The conditions under which this work happens are very difficult, with power cuts, dwindling broadband connectivity and lack of funding for farmer engagement threatening research and communication efforts on a daily basis; at the same time, the efforts made to overcome

these challenges are hardly ever recognized for their importance, with local researchers continuing to supply information with precious little opportunity to take part in further research and commercial developments around the findings.

When I consider these issues, and the scientific and social significance of fostering collaborations across highly diverse research environments, it becomes clear that obtaining smart, cutting edge technologies or implementing shiny Open Science policies is not the objective that research institutions should set themselves. Rather, the big challenge is redefining the very idea of “sustainable tech”, looking for tools and social structures that are both equitable and environmentally sound, and can help us humans better understand the implications of our interventions. This is where progressive academic institutions have a unique role to play, by providing a point of contact across sectors and social groups, and promoting research and teaching that may benefit the planet in the long term and beyond the mere pursuit of financial profit. I understand Tilburg University to have taken these values as its core mandate, and I am proud and thankful for my new association with this endeavor.