Address on the occasion of the 182nd Dies Natalis by Professor Tim van der Hagen, Rector Magnificus Delft University of Technology January 12, 2024 Delft, The Netherlands

[Mother Earth]

What has woken me from my slumber? Restless sleep though it was, as my mind is uneasy. You humans have neglected me for far too long. Have you forgotten you are part of nature, and all things are connected? I council you to be more careful, or you risk upsetting my balance, and believe me, you wouldn't want that...But here you all are, having a celebration? What is that all about? Am I even invited? I thought not.

Well, well, 182 years of age: a fraction in my book, but enough to make a deep impact. With your barriers and bridges, you've kept people safe, made them places to live and to thrive, here on the border between land and sea. Everywhere you look are the signs of your success. Railways and ring roads, tower blocks and factories and warehouses and what have you. Yet your successes are scarring my surface and spoiling the fruits of my womb. But the pendulum is swinging. Pollution and emissions are just one of the drawbacks of the wealth you've created. And now, once again, the waters are rising... But I, ah.... I am being ignored...

[Tim]

I hear you, Gaia, Mother Earth. And today we ask for your guidance. So please, feel welcome in our midst and let's benefit from your wisdom...

Mother Earth. A sad, but beautiful metaphor. And yes, for too long we've been exploiting the planet, indiscriminately taking its resources, leaving pollution, loss of biodiversity and climate change in our wake.

Technology has been both a bane and a boon. It has created prosperity and wellbeing, but also set in motion a tidal wave of cascading challenges. And now we're getting closer to a number of tipping points, for the planet, for humanity, for us here in Delft. Can we still fix things? I believe we can.

Because this call we've been hearing is not new. It's not just Mother Earth's call, but a call from society.

And we've been hearing it and listening and responding to it for many years. In the light of the current climate crisis, it's a call that sounds even louder, making our mission more urgent than ever: to create impact for a better society.

To keep achieving it, we've adapted our role as a university over the years. The need for practical, society-serving solutions made us reinvent ourselves, from a more classic seat of learning, to an innovative ecosystem. Here, scientific ideas do not just breed new engineers, but come to fruition in many ways, in collaboration with the worlds of business and government.

But pressing challenges call for unprecedented forms of cooperation, no longer confined to disciplines, places or organizations. We've shaped such new ways of thinking and working, through our collaborations with Rotterdam and Leiden, and The Hague and Amsterdam, initiatives we will continue and expand.

However, the complexity and impact of the current challenges demand that we deliver, more than ever. Deliver both in numbers of graduates and in solutions to tackle the transitions we're facing. And here too, we've been coming close to a tipping point. It's the point where we can no longer sustainably keep increasing our student and staff numbers to the number we believe is necessary.

So we're taking another unprecedented step, by starting a campus in Rotterdam. I shared this bold idea with you here last year and a lot has happened since then. We've formally adopted a strategy to grow and to develop new education, research and innovation activities in Rotterdam. To achieve this, we've set up a TU Delft Rotterdam Campus programme and a programme team is looking at the next steps. How will we attract new students, if possible from backgrounds that are underrepresented at our university at the moment. How will we staff, house and finance this enterprise? And what new academic and innovation programmes will we develop there?

Of course, we're doing this in close cooperation with our faculties and support services, so if you have any ideas, do share them with the programme team.

Over the coming months, we will inform you in more detail by and by, but the whole process will be one of years. Because bold as it is, we will approach things with all the necessary care and meticulousness, just as we do in our academic work.

That's because we're not doing this from some megalomaniac urge to grow, but because we're convinced that we need to think on a different scale. Moreover, I believe we're morally obliged to take this step. We owe it to ourselves, to our standing as a leading university of technology, to do this. And we owe it to mother Earth and to society.

One thing, though: expanding *beyond* Delft, does not in any way mean *leaving* Delft. Delft is our birthplace, our hometown.

Don't get me wrong, even though I really feel a strong, intrinsic drive to do this, it even gets me a little nervous. At the same time, I'm excited: I think we're pre-eminently the right organisation to take on this challenge. Moreover, this feels like another piece in the puzzle, a piece that makes everything fit logically together.

What I see before me, is this:

As TU Delft, we will sit at the heart of multiple ecosystems, not just in various locations, but based on shared interests and joint goals. Ecosystems where we share resources and exchange knowledge in different domains. Where we collaborate with local and regional partners, on shared desired economic or social outcomes. Where we work with knowledge partners, industry, authorities and all other stakeholders from society, to create impact for a better society.

Just think about it: in Delft we've our roots and our history of successes. A vibrant community, a strong creative ecosystem and unbreakable bonds with the city. And we'll continue to build and flourish here. In Amsterdam, we've our unique living lab for metropolitan solutions. In The Hague, we're quite literally working in the corridors of power. That's important, because successful technological solutions are also dependent on regulation and legislation, stimulation and facilitation. Together, that's already a rich tapestry of opportunities and resources. And by expanding – to Rotterdam – we'll be able to deliver in every dimension and every scale. We can spread our knowledge in new directions and create additional programmes. And hopefully, inspire new generations of students, who may not have considered an engineering career before.

Again, I'm not talking about change for the sake of change, or growth for the sake of growth. We're doing this, because we feel called upon to increase our contribution to society.

If not for ourselves, than for our children and our children's children, those who will live to see the year 2100. What kind of future awaits them? Usually, predictions don't say a lot about the future, but more about the times we live in now. They are expectations based on current perspectives. That will not help us approach the issues we're facing. We should open the door to new ideas, new collaborations, and new ways of thinking on how to help this world of transitions.

I believe that together, we can do this. We, as TU Delft, together with all our partners and allies, old and new. It makes me very proud to be part of such a wide community.

I would like to express my sincere appreciation, on behalf of both myself and my colleagues Marien van der Meer and Rob Mudde from the Executive Board, to our students, staff, and all our partners. Thank you all very much for your invaluable contributions!

That brings me to today's subject, and the theme of this entire Delta week: redesigning Delta's. As you've heard Mother Earth say, and as we've seen in the past few weeks, the waters are rising...

As a delta country we're particularly vulnerable to the effects of climate change, and these effects also seem to be coming faster than previously thought. We're famous for our Delta Works, but do we have the imagination and determination to deal with these current challenges? How do we safeguard our heritage, and more importantly, how do we keep safe? Here too, we should be looking for new perspectives and forming new communities, and during the past Delta Week, we've been doing just that.

A song about the sea brought us back to our theme for this week, redesigning delta's. It couldn't have been more appropriate, what with the rainfall and flooding, we've been experiencing recently. It has shown us a few things: first of all, that on the whole, our engineering heritage is doing a good job of keeping us safe. However, under the rapidly changing circumstances, we need to step up our efforts to a whole new level. We have to come up with new strategies, new commitments, new partnerships. As you've just seen behind me, that's exactly what we've been doing, during this Delta Week.

Great results that we can build on from here, don't you agree, Mother Earth?

[Mother Earth]

Certainly, my boy. If we stick to the dance, move in sync, and listen to the beat of my rhythm, we can achieve the transformation you crave. So keep your word and hold on to your ambitions, and we may live in harmony yet. Today, I feel heard, and seen, and I thank you for that. So I go from here with optimism in my heart. Don't think, however, that I have left altogether. You will hear me in the susurration of the river and the rustling of the trees. You can see me in the ripples on the pond and the colours of the soil. Goodbye, for now.

[Tim]

Goodbye, it was an honor to have had you with us.

And now a few final words from me. As you've heard today, Mother Earth demands us to do something more, and we should not be afraid to enter on that road. Naturally, I understand that you, that all of us, at TU Delft are all extremely busy, and that it may sound daunting. However, we can only do this together, and on this challenging path, we need to be kind to each other.

Unfortunately, while 2023 was the first year without Covid measures, the social game changer we hoped for and expected, where society would focus more on welfare, family and sustainability, did not materialise. Quite the contrary. The zeitgeist is one of polarisation, where shouting often seems to have taken the place of listening to one another. In these times of social upheaval and global conflict, we should take the time to listen to each other, without judgment. Our academic freedom is our starting point, it's one of the pillars of our achievements, and thus a privilege we should defend.

Doing this together, also means with you, all our partners outside of TU Delft: we hope you will join us on this journey, and enable us to take on our responsibility.

It will not be an easy road to take, but we're choosing our own path, and can follow it, step by step.

I'm confident that we can do it: we are TU Delft. And have been, for the past 182 years. So let's take the first step together today.