

The Good of the University

Critical Contributions
from the *Tilburg Young Academy*

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Editor's note

Throughout this volume, we refer to the strategic plan of Tilburg University, entitled “Weaving Minds and Characters: Strategy Towards 2027”. Therefore, it is not included as a reference in each individual contribution. We comment on the four C’s from the strategy, but we have inverted the order since young academics like to turn things around. This also puts a virtue, courage, in first place.

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On the Good of the University

Esther Keymolen

In 2022, Tilburg University entered its new strategic period which is marked by the publication of the university's vision, entitled: "Weaving Minds & Characters: Strategy towards 2027". The document provides direction for the steps Tilburg University wants to take in the coming years. It is centered around four key values that (should) guide the university community's behavior and choices: curious, caring, connected, and courageous. Explicitly preferring a rolling strategy, without committing itself "to action plans and programs for the next six years", Tilburg University invites its community to "contribute in an engaged way to the further development and realization of the Strategy".

With the book *The Good of the University* that you – as a curious reader have, rightfully so, picked up – the Tilburg Young Academy (TYA) has wholeheartedly accepted this invitation. TYA brings together early career academics from Tilburg University's various Schools with the goal of actively fostering a flourishing environment at the University. Bluntly put: they care and they are not afraid to show it!

Focusing on Tilburg University's key values – or the "four C's" as they are commonly referred to – the essays in this book flesh out what it takes to actually be(come) a good university. Backed up by scientific insights, the authors formulate both sharply and thoughtfully, as you can expect from engaged academics. This resulted in a book full of bold and thought-provoking ideas with a clear aim to shake up the status quo.

Several essays lay bare where the current university strategy deserves more depth or maybe too easily skims over intrinsic friction. For instance, what does it mean to strive for a safe university while there is also the call for innovation and interdisciplinarity, eminently uncertain endeavors? An entrepreneurial spirit is regarded as crucial at Tilburg University; but what does entrepreneurship come down to in the academic context? And if we know that university rankings and quantitative student evaluations are severely flawed and far from evidence-based, should not we oppose their use and develop our own instruments?

Taking the university's motto "understanding society" to heart, the authors do not shy away to reflect on how the university itself, as an inherent part of that society, should deal with societal challenges such as sustainability, gender equity, and the role of technology. To become a truly sustainable university might demand making well-considered choices concerning business relationships and investments. To become a truly gender-inclusive university might ask for substantial investments in setting up (or reviving) diversity recruitment programs. To become a university where technology not merely connects students and employees to increase efficiency, but actually caters to the needs of the community, it is of utmost importance to nurture a culture where the well-being of people always comes first. Several essays directly aim their attention at the core business of the university: research and education. By tackling topics such as open science and the task of educating responsible citizens, new pathways are sketched to ensure that the University does not merely talk the talk but walks the walk of a good university.

Reading this book, I am hopeful and inspired. But first and foremost, I also feel like I am getting a kick in the ass: to work harder, to listen better, and to use the bright and courageous ideas of young academics. I am sure that by reading this book, you will feel this kick too. Of course, change does not come over night and there are many things that we cannot control. But this does not relieve us of the obligation to ask ourselves every day: How am I contributing to a good university?

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Courageous

“When Even the Changes are Changing”: Safety, Interdisciplinarity, and the Challenge of Uncertainty

Catherine M. Robb

That the only constant is change is now taken to be something of a cliché. That universities should embrace change and be a force for change, is also taken as a given – the nature of science and education means that, by definition, a good university is at the forefront of knowledge and disseminates that knowledge to its students. Even the nature of our own university has changed, from a small Roman Catholic Business School founded in 1927, to an institution oriented towards the humanities and social sciences with over 20,000 students. In the latest strategy document, the Executive Board and Deans paint a picture of the nature of the change we now face as being different from the changes we have traditionally embraced and encouraged. This new type of change poses a challenge to our university, and “poses fundamental questions to us in all areas of thought and learning within our academic community”. What makes this change so demanding, as the university’s strategy says, is that “we live in a time when even the changes are changing”.

It is not at all clear what it means for “changes to change”. Two main “culprits” of this new kind of change are stated in the strategy document as (i) the development of the *Anthropocene*, in which human activity is having causative effects on the ecology and climate of the planet, and (ii) *digitalization*, in which information and processes are converted into digital technologies. These social and technological advancements, it is suggested, pose a challenge to the way in which a university functions, how it embraces change, and how it acts as a force for scientific innovation and educational development. But how these two developments cause “changes to change” is still ambiguous. In order to make sense of this phrase, it will be worth considering how the nature of change has the potential to challenge the institution of the university. If I may provide a brief suggestion, for change to cause fundamental disruption to science and academic practice it will probably have to involve at least one of three characteristics: (i) the rate of change will be so fast-paced that it becomes difficult to track and respond to, (ii) the way or process by which we create change becomes difficult to understand or something over which we have less control, or (iii) the outcome of change alters objects, people, institutions

and relationships in such a way that makes them difficult to understand, difficult to control, or unrecognizable altogether. It is highly likely that the changes posed by developments in digitalization and the Anthropocene have the potential to create – and arguably are already creating – all three of these challenging “changes” to the nature of change.

If this is the case, then we really are living in a time of radical uncertainty, where the rate, process, and outcome of change result in unpredictability, unreliability and precarious conditions for science and education. The good university, therefore, becomes an institution that not only needs to respond to and be a force for change but one that must respond to the uncertainty that comes from this change. The strategy document makes it clear that it is in this challenge of uncertainty that the future vision of Tilburg University rests: “We are being challenged to set the course in a context in which much remains uncertain. We want to learn from the actions we take, respond to developments, and anticipate changes”.

In the light of this “changing change”, *Weaving Minds & Characters* offers an overarching general vision for Tilburg University picking out particular “threads” that will provide a focus for policy commitments over the next five to six years. Two of these threads are a commitment to ensuring “social safety”, and a commitment to “interdisciplinary” research and education. On the face of it, these two commitments for safety and interdisciplinarity seem uncontroversial. However, in what follows, I suggest that given the challenge of uncertainty, the good university should not be a “safe space”, nor should it settle for the limitations and ambiguity of interdisciplinarity. Given the nature of decision-making in light of unprecedented change, along with the university’s commitment to its four “C” values (curious, caring, connected, courageous), we need a university that is *courageous* enough to question the nature of safety and the value of interdisciplinarity, *curious* enough to explore the need for risk, and *caring* enough to create radical and ethical *connections* between its students, staff, and partners.

The “Safe” University

In several places in the strategic plan, it is mentioned that Tilburg University is, and strives to be, a “safe environment”. This need for safety seems specifically woven into the core values of Care and Connectedness: we *care* about each other, so we offer and contribute to a safe working and study environment; a safe campus gives rise to a community feeling that fosters *connections* with each other. There is no doubt that we want the university to be an institution free from unjust discrimination,

exclusion, and harassment. The emphasis on “human dignity” requires that we treat each other with respect, and as such, Tilburg University is striving to become a fair and attractive employer, and a fair and caring advocate for its students. This is a timely and necessary commitment, but the exact details of how this will be further implemented are still yet to be seen – as admitted, these ideals are “not self-evident yet”. As a result of the uncertainty that comes with the fast-paced changes in social and digital developments, the strategy claims to be “rolling” and so will not commit itself to implementing any particular policy over the course of the next six years. However, there is no need to avoid committing to exacting procedures and policies to ensure the respect and fair treatment of all those connected to our university. These should have been made central to any strategic plan. Yes, we are living in a time of uncertainty that requires, in part, openness and flexibility. But our need to respond to injustice is not something about which we can merely be reactive.

If safety is to be defined and understood as “freedom from danger” and “the state of being protected from or guarded against hurt or injury” (OED, n. *safety*), then in some respects the university must strive for this without question. There are some unjust “dangers” or “harms”, or “injuries” that the university can and should aim to protect against, such as the harms of unjust discrimination, and physical injuries that may arise in the working or studying environment. However, the essential requirement to address systemic and localized issues of injustice is not the same as a general requirement for “safety” or guaranteed protection from harm. The general covering term “safety” is blind to a more careful and critical analysis of what counts as the kind of harms, dangers and risks we (as students and staff) need or want protection from. Are we courageous enough to ask whether some harms and injuries might be justified or necessary if we are to commit to our values, if we are to provide inspirational teaching based on innovative high-quality research? Are we courageous enough to ask whether the university’s commitment to courage and curiosity might sit at odds with its requirement for safety?

Inclusion and Sustainability are Not “Safe”

The Executive Board and the Deans have pointed at the different “threads” that will contribute to our safety, for example, sustainability, diversity, and inclusion. These are all neutral and descriptive nouns, and by themselves do not point to any necessary normative valence. Take for instance the word “inclusion”. In a more general sense, the word just means “the action or an act of including something or someone [...]; the fact or condition of being included” (OED, n. *inclusion*). It is the

opposite of “exclusion”, the act of excluding someone or something, the condition of being excluded. But by itself, this says nothing about *why* someone or something has been included or excluded, *who* we are including or excluding, and the extent to which this inclusion or exclusion is harmful.

By themselves, exclusion and discrimination are not necessarily harmful. We exclude and discriminate regularly and often for good reason. For example, we might need to discriminate (which just means to *distinguish* or *differentiate*) between those with disabilities and those without, so that we can provide extra resources to those who need the campus to be accessible in a certain way. When, for example, the School of Humanities and Digital Sciences (TSHD) hosts its summer barbecue for staff each year, only TSHD staff are invited – not our partners, not our children, not the students, not our colleagues from other Schools. This exclusivity enables TSHD to provide an important social event that provides a sense of community and connection-building amongst its staff that would not be possible at an event that was open to more people. When, for example, a student might violate academic integrity by knowingly and repeatedly plagiarizing, we might decide to exclude them from their study program. We need this exclusion; it allows us to uphold academic integrity in our institution. The inclusion of the student, and the failure to discriminate between good and bad academic practice, would be harmful to the values of the university. Inclusion is not necessarily just – it is our task to critically reflect on what or who we ought to include and exclude, to have the courage to include those who have a right to be included, and exclude those who should be excluded. Doing so might not be *safe*: the policy and relational changes involved will often require us to offend those who are still unaware of their biases, take financial risks, and commit us to breaking down (metaphorical) statues that represent and express injustice.

Take “sustainability” as another example. By itself, that something is sustainable just describes that it is capable of being “upheld” or “maintained” or “continued” (OED, adj. *sustainable*). But by itself, that something can be maintained or continued does not mean that it would be a good thing to do so. We might maintain the status quo and so preserve the unjust systemic discrimination of those who are under-represented or preserve outdated technologies that hinder educational progress. Sustainability is not necessarily just, and it is our task to critically reflect on what we ought to sustain, or from what we ought to break free. Doing so might not be *safe*: the policy and behavior changes involved will often require us to break from

tradition, to be a lone voice in a hostile crowd, and to make difficult choices that may end up offending or harming some yet benefitting others.

Daring to Take “Principled” Risks

It is not “safe” to ask questions and make decisions in the face of uncertainty. It is inevitable that the way to achieve success in eradicating entrenched expressions of injustice – both towards others and our environment – is by taking risks, daring to break with tradition, and making bold changes that have no precedence. Reducing work pressure for staff, providing accessible and quality education, exploring the developments of digitalization, ensuring that women academics are fairly represented and free from discrimination, reducing our carbon footprint, all require bold policy change that comes with risk. Safety is freedom from harm and following this to the letter would mean, for example, that we refuse to challenge our students, prevent them the emotional harm of receiving a low grade or critical feedback on their work, and spare them the necessary risks involved in thinking critically and creatively. But the strategy document is explicit that we don’t want this – we want a university in which we “dare to go against established views [...] to make mistakes”.

As a result, the university need not promise us social or epistemic *safety*, but something more radical than that – it should outline and promote a set of basic and detailed *principles* that determine an unwavering commitment to the ethical, respectful, and just treatment of its staff and students. Some Schools have already recognized the need for a “principled” rather than a “safe” university. For instance, in its own strategy document, TSHD has outlined its commitment to using the concept of a “principled space” which “assumes a set of shared values that all members of the community observe” (*Shaping our Future Society Together*, 26). In some instances these principles will require us to keep each other safe, when we have determined that the harms, offenses, and risks at play are *unjust*. But sometimes our principles will require us to be unsafe, courageous, to make unpopular decisions, to cause offense, and take risks. Our task as a university should be to determine what principles we commit ourselves to, and what these principles require of us. It is only by taking a stand on what counts as *unjust* harm that we can begin to analyze how a call for “social safety” fits with the four “C” values that are emphasized as central to the strategic plan.

The good university will make a priority of developing in its staff and students the skills that are necessary to recognize and analyze what counts as *unjust* harm that

we need protection from, the most appropriate way to respond to that injustice, and the nature of the biases that we bring with us. The recognition, understanding and evaluation of the nature and value of injustice necessitate literacy in critical thinking, logic, and a firm grounding in ethical theory. This is one of the reasons for the continued importance of Tilburg University's educational requirement that all students take at least two philosophy courses in their Bachelor's program. These courses ensure that students develop the vital skills to know the difference between safety that protects us from the effects of unjust harm, and safety that maintains a dangerous and unethical status quo.

Given the nature of uncertainty and the challenge that social and technological changes pose to us, the framework and constraints of justice change too. So not only must we develop the critical skills in which to make ethical decisions, but we must be committed to developing the skills that enable us to make decisions when there is no rule or law or framework that tells us what we ought to do. This uncertainty gives us an opportunity to shape not only the decisions that we make but *how* we make the decisions themselves. As Ruth Chang, Chair and Professor of Jurisprudence at Oxford University has claimed, making seemingly impossible decisions like these provide us with an opportunity to develop our rational and normative characters, putting our agency behind a choice and constituting what kind of person we want to be (Chang 2017, 19). The idea to implement an interschool general course on digital science is an exciting and necessary prospect. But this should in no way be a replacement for the philosophy courses that our students are entitled to. Our university stands out in its commitment to critical thinking and character development – we should strive to keep it this way even in the face of digitalization and the uncertainty that this brings.

The “Interdisciplinary” University

There is one point in the strategy document where the need for safety is explicitly noted as being incompatible with conducting research and education in a time of fast-paced change. The Executive Board and Deans briefly mention that our scientific and educational responses to the challenges posed by digitalization and sustainability require “leaving the safe comfort zones of our own disciplines”. In this respect, interdisciplinarity is strongly emphasized, promoted, and even preferred, considered to guarantee “groundbreaking thinking”. The importance of interdisciplinary research is highlighted by some of the only concrete figures and goals mentioned in the document; it is stated that the university will aim for 10% of research to be interdisciplinary, a new chair of *Interdisciplinary Studies* will be

appointed at the next anniversary, and a new *Platform of Interdisciplinary Studies* will be launched as part of a Tilburg-hosted international conference dedicated to interdisciplinary research and education.

These goals are courageous, especially given the risks involved when implementing institutionalized interdisciplinarity, such as the dilution of disciplinary competence, and a lack of clear and meaningful policy (see Abbott 2001; MacLeod 2018; Szostak 2017). However, to an extent the university's research and education are already interdisciplinary: there are researchers in different disciplines working on the same topics and problems from their different perspectives, and when it comes to teaching, each program already provides students with insights from other disciplines when it is relevant to the material or topic of the course. What the strategic plans seem to emphasize, however, is explicit *collaboration*, so that we can coordinate our research efforts between the disciplines to answer unified funding calls, and so that we can provide unified courses for students.

When it comes to education, the call for interdisciplinarity has the potential to dilute the quality of teaching that we provide to our students. The risk involved means that interdisciplinary education is not safe, insofar as it may produce harms that students need protection from. This can be easily seen when we look more closely at what interdisciplinarity involves. An interdisciplinary team will engage in a complex process: each participant must be able to conduct reliable and quality research in their own discipline, be able to clearly communicate their findings to others in the team, and negotiate with others through their different disciplinary perspectives to reach a shared research outcome (see Griffiths 2022). As such, interdisciplinarity requires a firm grounding in your own discipline, the ability to disseminate the outcomes of your research to those outside the discipline, and the negotiation of shared research outcomes from other disciplines in which you are not an expert.

Students, by contrast, especially Bachelor's and Master's students, have only just started to understand what their own field of study requires of them. When they do conduct their own research, it will often be unreliable, with mistakes and lack of analysis. Attempts to present their research to others will often be unclear. These mistakes and insufficiencies are welcome as part of the learning process we expect from all our students – we would not want it otherwise. We want our students to leave their degree programs as practitioners in their own fields, with the ability to communicate and collaborate effectively with others. We are expected

to provide students with the opportunity to develop communication, leadership and research skills, and to contribute effectively to a team when analyzing and solving problems. We need to be wary that the enthusiasm for interdisciplinarity does not detract from the necessary time and focus needed to develop disciplinary competence. Signaling to our students that they are ready for interdisciplinarity has the potential to breed false confidence, undermining the epistemic humility that is vital for science.

Importantly, interdisciplinarity is different from *multidisciplinarity*, which gives students multiple disciplinary perspectives when approaching a topic or question, and encourages the uptake of these perspectives to enhance the study of their own discipline. Some programs at our university already incorporate various disciplines, such as Organization Studies which is founded on a combination of disciplines including economics, psychology, and sociology. The inclusion of a new cross-School program or course in Digital Sciences will also be multidisciplinary. How these disciplines are combined is unique to each program of study, yet in the majority of cases, researchers working in a field that combines disciplines will specialize in only one of the contributing disciplines. For example, those working in the multidisciplinary field of Marketing will have trained individually in one discipline, such as psychology, economics, or data science. That these disciplines can come together as one field of research, or one program of study, is testament to how scientists collaborate with each other both in the classroom and in the (sometimes metaphorical) “lab”.

There is no question that multidisciplinary should be promoted, and the strategic plan does mention this as an important educational focus. But this should not be at the expense of an excellent grounding in one’s own discipline or field of study. While it is valuable to teach students the *skills* necessary for interdisciplinary research – and we do this already as part of the Tilburg Educational Profile – this is not the same as, and should be kept distinct from, a questionable commitment to actually *practicing* interdisciplinarity in the classroom.

Interdisciplinary Research is Not Courageous Enough

Whilst interdisciplinary education is not safe enough, when it comes to research the call for interdisciplinarity may be *too* safe. If, as the strategic plan claims, even the nature of change is changing, then we are living in unprecedented times and our research will undoubtedly be affected by this. We will be expected to invent new ways to solve problems, find new problems that we do not yet expect, and

be confronted with questions we could not yet predict. The good university will therefore be open to supporting research into new connections, themes and problems, and it is reassuring to see that Tilburg University's strategic plan suggests that it will do just that. However, this suggestion of innovation seems to be strictly connected to interdisciplinarity, as if the interconnection and interrelation of disciplines in response to the topics chosen by certain funding institutions will be *the* answer to the unprecedented challenge science is facing in the midst of radical change.

Perhaps in response to these radical changes we also need a radical research strategy. As the philosopher Jacques Derrida has pointed out, "interdisciplinarity implies that you have given, identifiable competencies – say, a legal theorist, an architect, a philosopher, a literary critic – and that they work together on a specific, identifiable object. [...] But when you discover a new object, an object that up until now has not been identified as such, or has no legitimacy in terms of academic fields, then you have to invent a new competency, a new type of research, a new discipline" (Derrida 2021, 7-8). What Derrida highlights here is the limitations of interdisciplinarity in the face of unexpected change and uncertainty, being bound by known disciplines and identifiable problems. If we really are to expect the kind of uncertainty forwarded by the strategic plan, then we need to demand something more open and more flexible than the normalized buzzword of interdisciplinarity. For example, Tilburg's strategy does outline the development of an emerging discipline – albeit one that has been emerging now for some time – that of the "digital sciences". Labelling this as a multidisciplinary or interdisciplinary research field does it a disservice, by limiting it to the questions, knowledge and skills that are bound to individual disciplines and already carved-out questions, instead of paving the way to foster new competencies in response to new themes and objects of study that are still yet to be found.

Rather than limiting ourselves to a call for interdisciplinarity, instead, we ought to be supporting our researchers to conduct outstanding work in their own disciplines, and providing the resources that enable innovation, communication, and collaboration with others. This collaboration should include not just researchers in other disciplines, but also for instance, corporate, social, artistic, and political partners, as is already suggested by the Strategy's mention of collaboration with external public and private institutions. To facilitate this, researchers need to be given adequate and appropriate resources, starting with more time in the task allocation for collaborative research so that the collaboration

does not become a superficial token or dilute already existing research projects. Furthermore, a commitment to “open science” is paramount to allow for effective communication between partners and the social impact of research (see NWO 2022), but interestingly this is only mentioned once in the Strategy document. Importantly, how can we begin to cross disciplinary boundaries if our colleagues’ work is inaccessible? What we mean by “open science”, and how our university will commit to the principles that govern it, should be a priority for the university. In fact, a change of emphasis altogether, from interdisciplinarity to “open science”, is much more appropriate given the kind of open, innovative, and collaborative scientific response that is required of us in the face of radical uncertainty.

Conclusion: Epistemic Humility and Making “Good” Choices

In the strategy document, the Executive Board and Deans write that they want to make “good choices”, create the “right conditions” and ensure that “the right things happen”. This intention is of course reassuring, yet what counts as the “right” and “good” choices with regards to the implementation of social safety and interdisciplinarity are still questionable and ambiguous. However, given the nature of uncertainty, we can never be sure if we have made the *right* or *good* choice until the future moment has already arrived. We do not really know if the decisions we make now will end up being those that produce a “good” university because the conditions that make something good or right are also expected to continually change. For now, as we navigate through these “changing changes”, it is our *epistemic humility* – the acknowledgement and acceptance that our knowledge and capacity to make decisions are limited and fallible – that will keep us open to the unprecedented developments that are inevitably coming our way.

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Every Character Needs a Productive Entrepreneurial Spirit

Werner Liebrechts

Tilburg University's latest strategic plan (2022-2027) focuses on four core values: Curious, caring, connected, and courageous. The university aims to be a place where both students and employees can (further) develop their character in these four directions. For this, they must acquire and demonstrate an entrepreneurial spirit, as the Executive Board and Deans state in their foreword. Later on, in the strategic plan, the importance of entrepreneurship and entrepreneurial thinking is emphasized several times more. The university strives to pay more attention to entrepreneurship during educational programs, and Tilburg University is involved in several initiatives that stimulate and facilitate entrepreneurship. However, it remains unclear what exactly is meant by entrepreneurship, who should master it, and what role the university plays in this. In this essay, I discuss possible answers and conclude: Indeed, every character needs an entrepreneurial spirit, but one that is productive for society.

Entrepreneurship and Entrepreneurial Spirit in the Strategic Plan

It is not uncommon for entrepreneurship to be seen as the solution to many problems. It is said to provide the necessary innovations, and hence, drive processes of creative destruction and accumulation (Schumpeter, 1934; 1942). In addition, small and medium-sized enterprises (SMEs) are widely regarded as the foundation or engine of the Dutch economy (e.g., Nederlands Comité voor Ondernemerschap, 2021). But what is entrepreneurship exactly? The answer to this question is more complex than it may seem at first glance. The university also does not seem to be able to answer this question itself. After all, *entrepreneurship* has been mentioned several times throughout the strategic plan, but nowhere does it become really specific.

Under the heading “connected” it says: “We want to expand the (social) entrepreneurship of our employees and students in the Tilburg Spoorzone, and we continue to support them with our IQONIC entrepreneurship program”. A question that this sentence immediately raises: Should entrepreneurship of all employees and students be increased, or should the number of entrepreneurs among employees and students be increased? In the former case, everyone

must get involved in entrepreneurship. In the latter case, room is left for non-entrepreneurial types (to the extent that they exist). And what does it actually mean for Tilburg University employees to be entrepreneurially active? Inside or outside the employer organization? As part of their actual job at the university or alongside it? And what support can IQONIC offer to students and employees exploring a wide variety of entrepreneurial initiatives at different stages of their life cycle? Fundamental questions that remain unanswered in the strategic plan.

One page later, it is again emphasized that entrepreneurship will be facilitated, especially on the external campuses in 's-Hertogenbosch (Jheronimus Academy of Data Science), Utrecht (Tilburg School of Catholic Theology), and in the center of Tilburg (in the Deprez building in the Spoorzone). Also here, the strategic plan does not get any more specific than this. It neither specifies how entrepreneurship will be facilitated at these locations, nor what the intended purpose is nor by whom and for whom exactly. Those directly involved seem to be allowed to flesh this out themselves. It was recently announced that the university has far-reaching plans to establish an additional IQONIC incubator in the Spoorzone.¹ According to the press release, it will be “the place where you, as an enterprising student and startup, want to be in the middle of”. But why? One can expect a university to have a good scientific basis for such a bold statement.

Then again a few pages later, under the heading “courageous”, one talks about “room for entrepreneurial thinking” and its importance for exploring “new paths from an independent spirit”. This seems to refer to having an entrepreneurial mindset or spirit. This is absolutely worth pursuing, as it could be beneficial to everyone to a greater or lesser extent, regardless of what professional career one aspires (see later on). As such, it is partially separate from the university’s efforts to stimulate and facilitate entrepreneurship in the traditional sense. It rather affects the culture of Tilburg University as an organization. For example, which learning and working climate prevails. To what extent does it offer room for nonconformists to voice their thoughts and ideas, for creative minds to explore new paths, and for everyone to make mistakes (and learn from them, of course)? But how does the university want to achieve and maintain this? The university’s strategy does not provide enough clarity on this matter either.

¹ See the press release about this (June 21, 2022) at <https://www.tilburguniversity.edu/current/news/more-news/opening-deprez-building-0>.

Entrepreneurship and Entrepreneurial Spirit in the Scientific Literature

In the Fall of 2021, a piece written by Professor Juliëtte Schaafsma appeared on Univers Online with the provocative title “Entrepreneurship clashes with the university’s core values” (Schaafsma, 2021).² Particularly interesting, because the university itself states that an entrepreneurial spirit is one of the crucial conditions for developing your character towards the four core values of the university. Schaafsma (2021) rightly says that entrepreneurship is often poorly defined (like in the strategic plan of Tilburg University, see earlier on), but then also does not get beyond a very one-sided, caricatured, and stereotypical image herself. According to her, entrepreneurship is almost equal to corruption, fraud, and relentless growth, purely for the entrepreneurs’ own benefit and always at the expense of (vulnerable people in) society and/or our world as a whole. Therefore, it is about time for further clarification and some nuance based on the scientific literature.

First of all, *the* entrepreneur does not exist. Research has shown time and again that entrepreneurs form a very heterogeneous group of individuals (e.g., Terjesen et al., 2016). The ambitious, growth-oriented founder of a startup is an entrepreneur. The owner of an established (small and medium-sized) enterprise is an entrepreneur. The solo self-employed individual (or freelancer) is an entrepreneur. But also what we have come to call bogus self-employed are entrepreneurs.³ At least, when we take their registration with the Chamber of Commerce (KvK) as a starting point. Based on this, self-employed individuals and employees are treated quite differently in legal and fiscal terms. However, the boundaries of this dichotomy are increasingly blurred (Liebregts & Stam, 2017).

On the one hand, not all self-employed individuals act as entrepreneurial as one typically expects of entrepreneurs. That is, they are not innovative and/or growth-oriented. On the other hand, there is a large group of workers with a paid job, who pursue innovative activities for their employers. These so-called entrepreneurial employees or *intrapreneurs* develop new products or services within the context of an established business (Antoncic & Hisrich, 2001; 2003; Liebregts et al., 2015).

² See <https://universonline.nl/nieuws/2021/10/06/ondernemerschap-botst-met-kernwaarden-universiteit/> (unfortunately, in Dutch only).

³ The so-called bogus self-employed are self-employed people without personnel (solo self-employed, *zzp'ers* in Dutch), who more or less execute the same tasks that they used to do as employees, or that they could do just as well as employees. There is often only one or a very limited number of clients, with whom the self-employed person has a certain dependency relationship. See also, for example, Román et al. (2011).

Such entrepreneurial behavior of employees is increasingly valued by employers, spurred by globalization and technological development.

Widely used definitions of entrepreneurship take this into account, either implicitly or explicitly. According to Shane & Venkataraman (2000), entrepreneurship is about “the discovery, evaluation, and exploitation of opportunities to create future goods and services” (218).⁴ This can be done either by setting up an entirely new business (as an independent entrepreneur) or by developing a new business activity within an existing business (as an entrepreneurial employee). Other definitions mention both possibilities more explicitly. For example, Sharma & Chrisman (1999) think of entrepreneurship as “... acts of organizational creation, renewal or innovation that occur within or outside an existing organization” (17). There are also so-called hybrid entrepreneurs, i.e., individuals who combine a paid job with running their own business (Folta et al., 2010). But, whichever of the aforementioned forms of entrepreneurship we are talking about, they all require a certain level of entrepreneurial mindset or spirit in order to be successful (McGrath & MacMillan, 2000; Kuratko et al., 2021).

Hence, entrepreneurship is omnipresent in society. It takes place within new and established organizations, of both public and private nature, and it is practiced by both independent entrepreneurs and entrepreneurial employees. All these different forms of entrepreneurship make important contributions to that same society to a greater or lesser extent. Entrepreneurial individuals innovate, create jobs, drive labor productivity, and hence, economic growth (Audretsch et al., 2006). All this at least improves our economic or material prosperity (Stam, 2015).

Having said that, an entrepreneurial spirit and skills can also be utilized in a negative way. In this regard, the late William Baumol once made a very valuable distinction between productive and unproductive entrepreneurship (Baumol, 1990). An obvious example of unproductive or even destructive entrepreneurship is organized crime. Criminals are often extremely entrepreneurial, but that is not quite the type of entrepreneurship a society strives for. Corruption and fraud are also good examples of this. We benefit, however, from entrepreneurs who engage in socially valuable activities (Baumol, 1990).

⁴ Shane & Venkataraman (2000) has been published in the *Academy of Management Review* (AMR), and is by far the most cited academic article in the entrepreneurship/management domain. At the time of writing, the article has over 20,000 citations.

In short, the question is not whether we should embrace entrepreneurship – we should, without a doubt – but how we can ensure that entrepreneurial talents use their knowledge and skills in a way that is productive for society (or at least not destructive). That is, in such a way that an increase in our economic prosperity is achieved while respecting ecological limits, and in a socially inclusive manner. Then we talk about so-called *broad* prosperity, an approach that also includes intangibles like happiness and well-being, of both current and future generations (see also Stam, 2022). Social forms of entrepreneurship contribute to a society's broad prosperity almost by definition, but – mind you – social entrepreneurs also need a good dose of entrepreneurial spirit in order to survive or even grow.⁵

Entrepreneurship, Entrepreneurial Spirit and the Role of the University

Now let us get back to the seminal work of Baumol (1990). In it, he also argued that how entrepreneurs behave mainly depends on the prevailing institutions, or “the rules of the game, the reward structure in the economy” (Baumol, 1990: 3; see also North, 1990; 1991). An important distinction here is the one between formal institutions (such as tax and competition rules) and informal institutions (such as cultural norms and values). Whereas rules and laws can be adapted by policymakers, cultural influences are path-dependent and can hardly be changed, if at all. This at least requires a very long time. Baumol (1990), however, reasoned that *we* should not wait for slow cultural changes, but rather proactively change rules in such a way that they (partially) undo any undesirable cultural effects. Anyway, it is the institutional framework that determines which type of entrepreneurship (productive or unproductive) is more common, and thus ultimately the extent to which society benefits from entrepreneurial activities (see also Bjørnskov & Foss, 2016; Bruton et al., 2010).

In his article, Baumol (1990) mainly discusses institutions at the national level and points to the crucial role of governments in shaping them. At the same time, rules and reward structures are also designed at many other levels. This brings us to the role of the university. The university must realize that it has a strong influence not only on the number of entrepreneurs it produces but also on the extent to which they contribute to our (broad) prosperity. At the moment, the university's strategy merely mentions the importance of entrepreneurship and entrepreneurial thinking in a generic sense. And Tilburg University seems to be prepared to stimulate and

⁵ Social entrepreneurship refers to all entrepreneurial activities “with the explicit objective to address societal pains” (Lepoutre et al., 2013: 693).

facilitate all this as much as possible. The more, the merrier, so it seems. However, its focus should be shifted from quantity to quality (Bosma, 2022; Techleap/UU, 2021). That is, the university should strive for as many characters as possible with an entrepreneurial spirit that is productive for society.

But how far does the university's influence reach? When delving deeper into the entrepreneurship literature, we see that researchers have been questioning for decades whether entrepreneurship is something in a person's blood, whether it can be taught and learned, or a combination of both. This is also known among entrepreneurship scholars as the nature-versus-nurture debate. In other words, is someone born to be an entrepreneur or can entrepreneurs be made (better)? The short answer: There is empirical evidence for both perspectives.

On the one hand, involvement in entrepreneurial activity appears to be genetically determined (see e.g. Nicolaou et al., 2008). On the other hand, research shows that one's environment or upbringing can also play an important role, although there are rather large differences between men and women (Zhang et al., 2009). Yet another strand of literature looks at the influence and effectiveness of entrepreneurship education. The numerous studies within this stream create a mixed picture; there is some evidence that you can effectively educate individuals in entrepreneurship or key elements of it (see e.g. Von Graevenitz et al., 2010), but there is also some research that finds no or even negative effects (see e.g. Oosterbeek et al., 2010). Above all, there is much criticism on the methods used in this scientific domain. For example, one usually looks at short-term effects and subjective outcome measures, such as a person's intentions to start as an entrepreneur (Nabi et al., 2017). Even though students' entrepreneurial intentions often increase because of entrepreneurship education, this does not necessarily mean that they will become self-employed later on, let alone whether one is (and remains) successful in the longer term (Pittaway & Cope, 2007).

All in all, it is not yet a foregone conclusion that entrepreneurship education produces more and/or better entrepreneurs. It should be noted, however, that all existing studies use a narrow definition of entrepreneurship. They only look at the effects on independent forms of entrepreneurship, not at the impact on entrepreneurship within existing organizations. If future studies were to include that option, there could well be a significantly altered picture. It is quite conceivable that entrepreneurship education will give students a taste of what self-employment entails, deterring some of them, and steering them towards a salaried

job. Nevertheless, a certain entrepreneurial spirit and related skills are also very valuable in that context. In fact, in a corporate environment, all kinds of important resources are more widely available than in a startup context. Think of human, physical and financial capital, which usually makes it easier to develop and scale new products and services.

So much for the alleged effects of full entrepreneurship programs (such as Tilburg's Bachelor's in *Entrepreneurship and Business Innovation*) and entrepreneurship courses or trainings within other types of programs. Given the existence of several university incubators, and the intention to establish yet another one in the center of Tilburg (see earlier on), it is also worth looking at what the scientific literature tells us about their efficacy.⁶ There is a study that points at incubators' positive contribution to the regional economy, provided that there are sufficient opportunities for early-stage financing, such as seed capital by *business angels* in the network of the incubator (Aernoudt, 2004). The same study emphasizes that there are many different types of incubators, each with their own philosophy, objectives, and activities. Therefore, it is difficult to determine the effectiveness of incubators as if they are one particular type of organization. Colombo & Delmastro (2002) find a number of specific positive effects of incubators that particularly focus on technology-based startups. On average, supported companies achieve higher growth, adopt advanced technologies faster, and are more successful in establishing collaborations (with universities, for example). So, there is something to be said for university incubators, but conditional on having clear objectives and a sharp demarcation.

Conclusions and Recommendations

The strategic plan of Tilburg University highlights the importance of entrepreneurship and an entrepreneurial spirit among students and employees. That in itself is good news, but it lacks an in-depth vision and a clear explanation. The university allows itself to express vague intentions and to share generically formulated objectives. This provides unnecessary room for criticism because it is easy to argue why every character needs an entrepreneurial spirit. It is important, however, that students and employees apply their knowledge and skills – whether this has been learned or not – to entrepreneurial activities that lead to social value creation.

⁶ Besides IQONIC in the Intermezzo building on the main campus of Tilburg University, there is also the JADS Playground on the campus in 's-Hertogenbosch.

In this essay, I have explored our collective understanding of entrepreneurship. We often think of individuals or teams setting up and owning-managing a business for their own risk and reward (independent entrepreneurship or self-employment). However, entrepreneurship has many manifestations, including entrepreneurship by existing firms (corporate entrepreneurship), by employees within existing firms (intrapreneurship), and by (employees of) public organizations like most universities (public entrepreneurship). Each of these forms requires a certain entrepreneurial mindset or spirit. Furthermore, I have outlined how all aforementioned forms of entrepreneurship can contribute to our prosperity, in both its narrow and its broad sense. In order to achieve this, we must avoid unproductive entrepreneurship, and instead focus on activities that are productive for society. Think of entrepreneurs who want to contribute to important contemporary societal goals (social entrepreneurship).

In its strategic plan, Tilburg University includes hardly anything about what kind of entrepreneurship it strives for. Every student and employee is supposed to act entrepreneurial, no matter how, so it seems. This directly contradicts the current scientific discourse, which clearly acknowledges that not every form of entrepreneurship makes a valuable contribution to society. This calls for clear choices regarding whom should think and act entrepreneurially, in what way(s), and what role the university has. I challenge the university to extensively reflect on all this in a further explanation of its strategy, as an advance on the next multi-year strategic plan. It is well known that entrepreneurs benefit from as few contextual uncertainties as possible, and from having a clear direction. This is perhaps even more true for all the budding entrepreneurs and their stakeholders that our beautiful university is home to.

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The Talent Management Revolution: On the Way to Creating a Career Path for Everyone

Judith Künneke

In November 2019, the Dutch universities, university medical centers, research institutes, research funders, and the Royal Academy started the movement toward a new form of recognizing and rewarding academics. The core idea was to provide room for everybody's talent and to create a new balance of recognizing and rewarding our diverse talents. Currently, many academics feel that mostly colleagues with a long list of top publications are valued, although we master various competences in the areas of research, education, impact, and leadership (and patient care in medical centers) which are all key to a productive and healthy working environment. Therefore, the modernization of the recognition and rewards system aims at the diversification and vitalization of career paths, thereby promoting and rewarding excellence in each of those key areas.¹ More specifically, the goal is "... switching to a system in which academics can make a mark in one or more key areas (diversification). In this system, the area profile of academics may change in the course of their career (vitalization), and competences acquired outside of the academy are acknowledged as having added value. The inter-connectedness of education and research, typical of the Dutch university system, does require that academics have enough competences in at least these two key areas. Within a team, department or faculty, the different profiles and backgrounds are integrated into a coherent whole." (VSNU, NFU, KNAW, NOW, and ZonMw 2019).

Integrating this profound initiative at Tilburg University, a quite creative person designed a slogan that is to the point: "(y)our talents". A simple, but quite a meaningful combination. A short expression capturing an essential element of the nationwide *Recognition and Rewards* program: achieving a balance between individuals and the collective, and appreciating unique talents that together form a greater outcome than individually. Tilburg University is committed to changing its DNA in terms of how we cherish talent and stimulate the talent management revolution.

Where are we standing as Tilburg University?

Self-determination theory (Ryan and Deci 2000), a major framework that explains human motivation and behavior, is a suitable tool that helps to describe the status quo at Tilburg University. Self-determination theory proposes that people are self-motivated to engage, grow, and develop, i.e., become self-determined, by fulfilling the following psychosocial needs:

- *Competence*: People need to be able to master tasks and gain the right skill set to perform those tasks. Once people feel that they have the required skills to be successful, they are more likely to be intrinsically motivated to achieve their goals.
- *Autonomy*: People need to have the freedom to perform tasks that they feel intrinsically motivating (and therefore rewarding) to complete. Control over job design is crucial.
- *Relatedness*: People need to be connected with others and feel a sense of belonging. Support and involvement with each other and each other's activities are necessary.

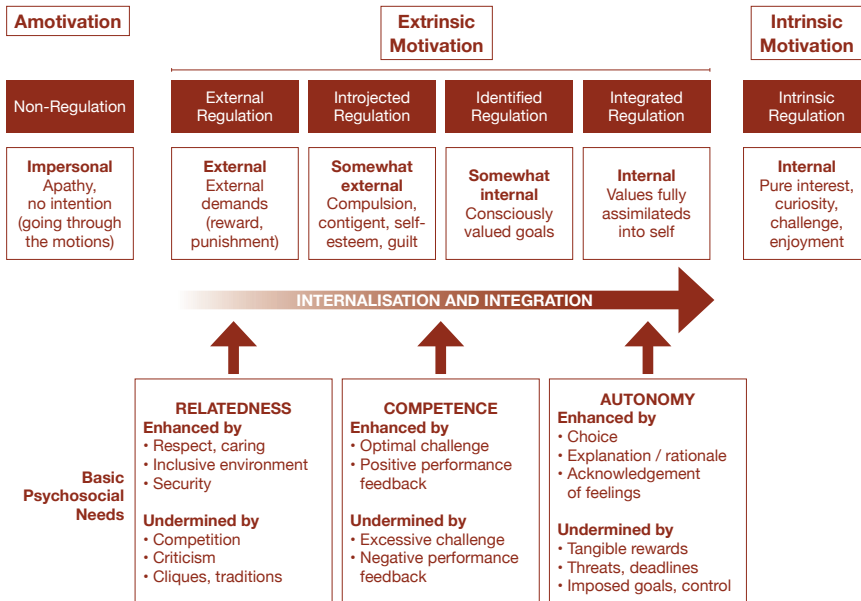


Figure by Cook & Artino (2016).

Applying the framework to the university setting, one prominent aspect is external regulation. In general, higher education is a highly regulated sector that needs to comply with European- and nationwide rules and demands. While (to some extent) understandable, it puts the sector and its employees at a disadvantage from the start. While external parties have a significant impact on the way we provide education, creating one bureaucratic hurdle after the other, the decreasing budgets for research impose a risk on our knowledge creation and research ambitions. This rigid environment does not seem to fit with the typical free-minded character of academics. However, for the moment, these are conditions mostly outside of our control, so we turn to aspects that we can indeed influence.

Depending on who you ask, you will receive a different answer on our status quo. Yet, looking at the bigger picture, a couple of facts reveal the improvement potential at Tilburg University. When focusing on *relatedness*, one aspect is creating an inclusive and secure environment to nurture growth and development. But while, for example, the percentage of international staff is growing, the primary language remains Dutch, particularly in leadership positions. This does not imply that we should not respect the fact that we are in the Netherlands, but unconsciously the voice of international colleagues is silenced. Through this language barrier, international colleagues are excluded from central strategy and working groups, and there is consequently lower diversity in decision-making and the views of part of our employees are underrepresented. Approaching work with a more international mindset without asking “Does everybody speak Dutch so we can switch?” is a very small but meaningful effort to create an inclusive environment. We also ask our students to mind potential differences, so why not ourselves? Turning to *competence*, some employees indicate that they never had an official (performance) feedback meeting. Given that this occasion is one of the most important moments to sit back, reflect on the past year, and plan the upcoming period, this information sounds less than satisfying. A review meeting provides the opportunity to focus on the individual, and the time that each one of us deserves to discuss our potential and growth, and our personal challenges. Why is there so much variance in holding such sessions? Growing a culture where feedback becomes an integral part of our life is key in making the *Recognition and Rewards* program a success. And this is actually closely related to *autonomy* as well. Tilburg University has many possibilities to fulfill our basic psychosocial need for autonomy, and creating different career paths and allowing everyone to use their individual talents is remarkably in line with self-determination theory. Giving people the opportunity to use their unique talent and the choice to engage

in particular activities in a secure and inclusive environment allows intrinsic motivation to manifest itself and experience joy and satisfaction from the activity. By allowing for more flexibility, people feel more motivated to complete the chosen activity and experience more direct, internal *rewards* for performing the chosen activity at hand. But giving flexibility can also cause confusion, therefore a reliable source of feedback is necessary to guide employees and sometimes to help them discover their talents in the first place. Fostering intrinsic motivation is essential as it is considered to be a strong predictor of performance, but even more importantly, intrinsic motivation matters more for *quality* than extrinsic motivation (Cerasoli et al. 2014). Since “*the pursuit of high quality is central to our commitment to research and education*”, the university benefits from providing an environment where intrinsic motivation and hence self-determination is facilitated, and where people are set up for growth and development. Tilburg has definitely the tools to move us toward the right on the motivation continuum.

So much for the theory, now back to practice!

The idea of revamping our recognition and rewards system sounds fantastic on paper, but then real life kicks in and usually not in the “all is rainbows and unicorns” format, and it will probably require more work than we have anticipated (isn't that somehow always the case?). Therefore, employees at all levels need to commit to contributing their part, to moving in the same direction, and to achieving our ambitions in recognizing and rewarding...ourselves!

But let's start with the Executive Board. While it is quite effortless to include a variety of themes and topics in a strategy, it becomes reality once the budgeting season starts. In order to push this modernization forward in practical terms, the people involved need time. Many employees spent hours in working groups and deliberation tables, gathering ideas, and preparing documents. People create plans for new career paths, propose criteria to assess talent, HR needs to create processes to support the new system, and the list goes on – and this is only for the setup. If Tilburg University wants to make this modernization a success and “*stimulate a culture of continuous feedback, reflection, and open dialogue*”, it is quite evident that more administrative and managerial time will be needed by central people or departments such as the deans, department heads, or HR. In the interest of well-being and stress relief, the university needs to provide budget to hire sufficient people to absorb the additional workload that comes with the implementation and execution of such a holistic program, that is, walk the talk.

Next in line: our deans, department heads, and everyone who leads a unit or a team, or in short, our managers. Managers usually bring a strategy to life, but where to start? Probably at the beginning: talent management already starts at the hiring stage. Employee selection plays an important role in aligning intrinsic motivation with the talents required to achieve the university's strategy. A study by Campbell (2012) provides empirical evidence on the usefulness of proper control "at the gate". In his setting, the company underwent a major change in its business strategy, which required a rebalancing of employee talents and a new composition of competences. In essence, this setting can be compared to the re-orientation of the university and its talent management approach. Several findings are interesting: employees hired under the "old" strategy perform worse than those hired under the "new" strategy (and are also more likely to leave as the tasks are not aligned anymore with their personal preferences and motivation). In addition, new hires based on recommendations from people who were already hired under the "new" strategy, show superior performance. When applying this to the university, there are a couple of implications. Employees who were hired under the "old system", that is, a system with an (over-)emphasis on publications, might perceive a misalignment between their personal goals and those of the university. It costs time to implement the idea of considering other activities as equally relevant for the job as academic. But not everybody might want to take the time or agree on the new vision, and therefore, the university and managers need to be aware of a potential increase in turnover due to the desired organizational changes – which is not necessarily undesirable because the university aims to keep and attract people who stand for its values. Attrition is oftentimes seen as negative, but it can be a consequence of dissatisfaction with the job, and people can find a more aligned work profile at another employer. It creates a *healthy turnover* and puts again more emphasis on recruitment practices, which also concerns the second implication: recommendations can be a relevant source for new hires, but it is important to watch out for who gives the recommendation (i.e., "old" system or "new" system employees). Although not directly tested, *who* is conducting the job interviews with candidates might also be of relevance. Oftentimes our managers are involved in the hiring process, but usually, these people grew up under the old recognition system where typically the number of publications counts the most. Unconsciously or consciously (with the latter being deliberately harmful), by emphasizing high performance in only one of the key areas, the interviewer might evoke incorrect impressions about the values and talents needed at Tilburg University, thereby eliminating the benefits of employee selection as alignment tool, and providing a false outlook to the potential employee.

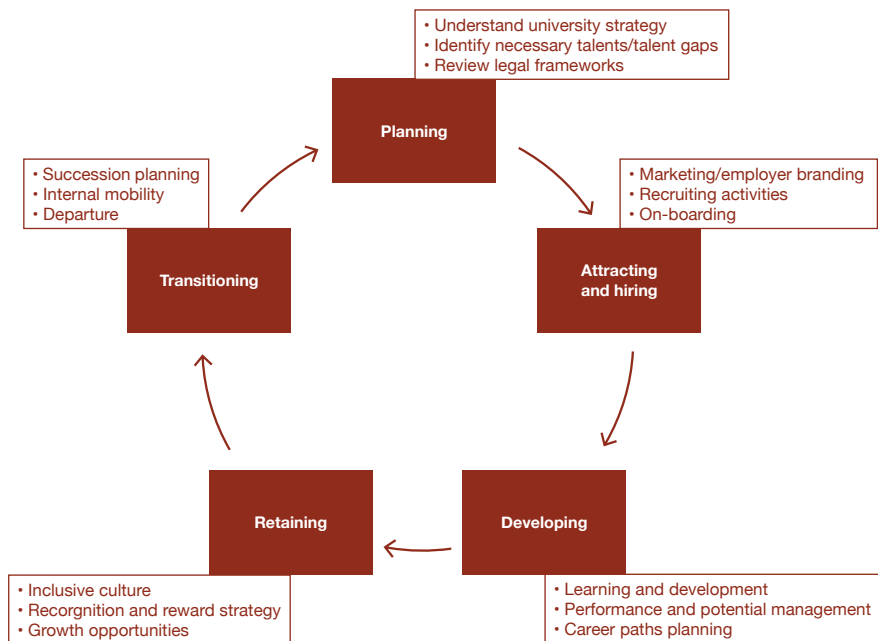
Once hired, it is crucial that our people managers understand the relevance of providing feedback and evaluating employees, i.e., take the time (that is provided by the university) to adequately apply the talent management process. And just as in the interview stage, it is essential to provide feedback and evaluate based on the perspective of the “new system”: stop hammering on publications only, but take a look at different types of achievements of the individual. Only by integrating the idea of diverse talents and career paths into the evaluation process, the university will see desired results. This formal application of the performance/talent management cycle is critical; not only because it is associated with higher trust between a manager and the employee, but it also enhances the perceived quality of feedback and procedural justice (Hartmann and Slapničar 2009). Feedback is essential to stimulate development (Kluger and DeNisi 1996), but so are assessments. Formal assessments create a moment of reflection. Going through assessment criteria supports employees in discovering their talents, but also their blind spots, and deriving necessary development activities.

Or not...? The idea of *Recognition and Rewards* is to cherish and support someone’s talent, and not dwell on poor performance. Yet, the universities also agree that academics need to have sufficient competence in, at least, the key areas of education and research, which complies with our purpose of creating and disseminating knowledge. So back to dwelling on poor performance, at least a bit, unfortunately. This is not the most popular task among managers, but *good* managers understand how to create an open dialogue, and they understand the importance of honesty for the development of employees, and the university is ready to coach managers in fulfilling their role.

But before being able to identify talents or determining improvement activities, the more pressing questions first: What should be assessed? How should it be assessed? Who should assess it? What career paths can be created with what criteria? These questions represent probably the largest challenge but also the most important one because the answers to those questions will be used to guide employees in their (diverse) careers and, hopefully, to success. And while the *Recognition and Rewards* program tries to steer away from quantifiable indicators, according to a goal-setting theory, people are naturally inclined to work harder for specific goals (Locke and Latham 2002). This implies that “Do your best!” will probably not do it. For example, let’s consider impact: Instead of trying to create impact with your research, give one company workshop or contribute to two podcasts. That sounds already more specific and provides more guidance to employees as to what

is rewarded. It is simply more complicated to capture quality in tangible indicators; putting a number on it is only of secondary importance. A decent amount of research needs to go into the determination of criteria that properly reflect Tilburg University's key areas of education, research, social impact, leadership, and team spirit. Only by regularly applying the assessment process, managers are able to understand whether all necessary talent is covered at their unit level. And again, not everyone needs to be equally productive across all key areas (besides research and education at some decent level). Not everyone needs to become the next dean or needs to be interviewed on TV, but at the unit level, the composition has to be right to cover the key areas of education, research, social impact, leadership, and team spirit.

As you have probably inferred simply from the length of the text relating to managers, a big chunk of the responsibility to modernize our recognition and rewards system lies on the shoulders of our managers. And this is where Human Resources comes into play. HR, as a central organ of the university, is in a superior position to uniformly integrate the recognition and rewards strategy throughout the university, faculties, and departments. Talent management is a circular process with sufficient opportunity for HR to steer the university and its employees in the right direction:



For example, when thinking about diversification of career paths, investments in the development of assessment procedures and criteria will be necessary to help managers with the renewed talent management approach because as described above, the idea to diversify career paths does not imply “you can do whatever you want”. There needs to be some guidance under which circumstances employees can change their career paths. In general, supporting processes need to be redesigned in a way to assist managers and fulfill their role as people managers effectively and efficiently under the new recognition and rewards system. In addition, sufficient training possibilities on how to be a *good* manager and not just *a* manager needs to be created because as we know, people do not necessarily leave organizations, but their manager (who might have not internalized and hence reflect the values of the organization).

Back to all employees. Tilburg University is in the position to offer a unique chance to embrace all its employees, and where all people can be treated equally. No one person, or talent, is better than the other, and all are necessary to keep this organization running. This also implies leaving some egos behind. For example, a deeply passionate researcher might not be fond of teaching-oriented employees receiving promotions to the professor level because this has been the mindset many academics were raised to adopt. A more fruitful perspective is to acknowledge that a pro in teaching contributes to Tilburg’s mission to disseminate knowledge and its reputation as a top university. Why should this not be rewarded? And the passionate teacher is probably eager to take over some of the teaching responsibilities of the passionate researcher, so it appears that ultimately both are better off and can spend more of their time on the activities they enjoy the most and are intrinsically motivated to pursue. This is only one of many examples where we need to question our own mindset and reconsider our behavior such that we as individual contribute to the success of the new strategy.

By allowing everybody to use their talents, and equally recognize and reward those talents, Tilburg University is on its best way to become an employer that is able to attract and retain world-class academics. Let’s get it started!

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Connected

Becoming a Sustainable University

Floor Fleurke, Anne Lafarre

A sustainable society is a prerequisite for all present and future human aspirations. Yet, in both developed and developing nations, the rapid environmental decline in its countless manifestations is now hindering the realization of even the most essential human needs (freedom, shelter, and food as articulated in a range of human rights treaties). Sustainability thereby is the single most important societal challenge facing humankind, a fact for example reflected in the proportion of the overall EU research budget earmarked for sustainability research (30%). Actually, human activities put more pressure on the earth and its nature than ever before. This year “Earth Overshoot Day” fell on July 28, meaning that humanity has used all the biological resources that the earth generates during 2022 in the midst of the summer and before we even finalized writing this short essay.¹ The second tranche of the sixth IPCC report from April 2022 finds climate impacts are already more widespread and severe than expected with just 1.1 degrees Celsius, and climate risks will quickly escalate, even with limiting global warming to 1.5 degrees which most scientists now agree has become unattainable.

Extreme heat, severe floods, withering droughts, food security problems, species extinction and lost ecosystems caused by anthropocentric climate change are now starting to impact our daily lives. These challenges are exacerbated by the ongoing Covid-19 pandemic and the war in Ukraine, leading to more than a quarter of a billion more people worldwide at high risk of ending up in extreme poverty this year.² To make things even bleaker, all the above-mentioned events are subject to so-called “infowars” and polarization in society at large, seriously undercutting our democratic institutions (which in itself is a Sustainable Development Goal).

What is then the role of universities in this looming sustainability crisis? At the core of any university lies the mission of vigorous truth-seeking teaching and research. Its institutional independence (even though under constant debate and threat) and the principles it adheres to such as free inquiry and debate provides it with a unique and essential function in society, and the challenges it faces. Taking this simplified mission, for the hard sciences the answer to that question becomes rather straightforward. Scientists in these fields are giving us *quantifiable*

¹ <https://www.overshootday.org/>

² <https://www.oxfam.org/en/press-releases/terrifying-prospect-over-quarter-billion-more-people-crashing-extreme-levels-poverty>

facts about the state of the natural world and the creatures living in it. During the pandemic, scientists have for instance provided us with methods to mitigate Covid-19. First through the use of masks, social distancing and regular testing, and later by developing vaccines in record time.

There exists, however, no vaccine that can produce a sustainable society in which human rights are respected across global value chains nor can the scientific reports of the IPCC mitigate the emissions of CO₂. This will ultimately be dependent upon political, social, economic, and behavioral choices. It is exactly here where the potential impact lies of the social sciences: it seeks to inform these *qualitative* choices through its research. After all, on the basis of countless experiments, conservation psychologists have shown that the root cause for environmental decline and social problems resides in *human behavior* rather than in *human nature*. This implies that the quest for sustainability in fact is a quest to influence and organize human behavior in novel and innovative ways. As a leading and internationally recognized research-led university specializing precisely in human behavior and its societal implications, Tilburg University is well positioned to take up that challenge. This is also true because the channeling of human behavior in pursuit of sustainability calls for *collaborative* efforts of disciplines that are all well represented at the university. Economists, legal scholars, psychologists, sociologists, political scientists, anthropologists, philosophers; each possess parts of the invaluable know-how needed to steer humankind towards a sustainable future.

In this short essay, we explore the ideal of Tilburg University as a “Sustainable University”, fit for the future. Here, like the Sustainable Development Goals (SDGs), we take a broad notion of sustainability, including all aspects of sustainable development. We will first examine what the concept and core elements of a “Sustainable University” entail. We will then proceed by providing a quick scan to what extent Tilburg University is on its way to becoming a Sustainable University, by looking at its research and teaching portfolio as well as looking at the university as a management organization. The university plays a key role at different levels, not limited to its core research and teaching activities. We recognize that it also is a large economic organization making management and investment decisions, it maintains a materially complex campus that needs to be a flourishing space for student life, it is a workplace with a regional impact, an employer, etc. However, as we will show, it seems that Tilburg University perhaps puts a somewhat disproportionate focus on the physical aspects of a Sustainable University, thereby overlooking its important social function. As this essay is intended as a constructive

starter for a university broad debate, we will finish by making some suggestions that will hopefully continue the debate about a Sustainable University.

What is a Sustainable University?

Scholars have been dealing with the question what makes a university a “sustainable organization”. Following Munguia Vega (2019), a sustainable organization is an organization that follows or is committed to advancing the principles of sustainable development under the 2030 Agenda. For a university, this would mean covering its important aspects, including sustainable education, research, and organizational structure. Particularly, Velasquez et al. (2006) require a Sustainable University to address, involve, and promote, “on a regional or a global level, the minimization of negative environmental, economic, societal, and health effects generated in the use of their resources in order to fulfill its functions of teaching, research, outreach and partnership, and stewardship in ways to help society make the transition to sustainable life-styles”. The study of Velasquez et al. outlines a continuous improvement model with four steps that a Sustainable University can take to strategically move towards sustainability, including defining a sustainability vision and mission (steps 1-2), and reorganizing its organizational structure in such a way that a sustainability commitment is reflected (step 3). Here, a sustainability committee with a representation of a large variety of stakeholders of the university, including students, academic and non-academic staff members and external stakeholders, can play an important role in formulating and establishing policies, objectives and targets. It also should have a main decision-making function. Finally, step 4 involves developing and implementing sustainability strategies that cover all important aspects of the university. To ensure the effectiveness of their strategies, sustainable universities can conduct a sustainability audit.

Tilburg University explains that it seeks to study and understand society and in this way contributes to solving complex societal issues. This can be understood as a mission statement that requires the university to be a Sustainable University, which also follows from its webpage section that is called “Towards a Sustainable University” (Tilburg University, 2022). Here, it states to be “committed to a sustainable society and encourages researchers, teachers, support staff, students, and stakeholders to actively contribute”. According to its 2027 Strategy *Weaving Minds & Characters* Tilburg University wants “to set an example in the sustainability of [the] campus and activities based on [TiU’s] responsibility to society”, and fully realizes “that the position of the weakest in society are very vulnerable and that the ecological issues are enormous. They require [TiU] to take responsibility for keeping society and the

earth livable for the generations to come.” It thus seems that Tilburg University has a sustainability vision and mission (steps 1-2). To be complete here, we should also mention the 2019-2021 Sustainability Plan; although this program is no longer in place, it sets out a clear sustainability vision for the university: “TiU is committed to making a measurable contribution to the UN Sustainable Development Goals in research and in education, in the day-to-day management of the campus and in the management of our assets” (De Kort et al., 3).

There is no evidence of a sustainability committee with a decision-making function within the governance structure of Tilburg University (step 3). Prior to the introduction of the 2027 Strategy, however, there was a Sustainability Program with a dedicated group of the university staff members (the Sustainability Program Team), also including professor Kees Bastmeijer (Professor in Nature Conservation and Water Law). The 2019-2021 Sustainability Plan explains that the Sustainability Program falls within the portfolio of the President of the Executive Board, but that the Executive Board is supported by the sustainability program team and accompanying teams (De Kort et al., 27). An updated version of this Sustainability Plan is not (yet) available, the Sustainability Program has been canceled and it remains very unclear what would happen from 2022 onwards. It perhaps seems that Tilburg University assumes that sustainability is an integral part of the 2027 Strategy and that such a separate program and committee is no longer a necessity. This, however, appears to be a dangerous route; sustainability is a complex matter - often competing with more short-term objectives - and the allocation of talent and time in relation to sustainability can be optimized in an independent committee that includes stakeholders from various perspectives, particularly also including academic staff. In this way, a science-based and holistic approach to sustainability and a Sustainable University can be ensured. The sustainability committee may not only take part in the decision-making; at the same time, a (subgroup of) such a committee can also have a monitoring role to safeguard Tilburg University’s sustainability ambitions in all its facets.

What about Tilburg University’s concrete sustainability ambitions and strategies (step 4)? The 2027 Strategy also has a section “Sustainability and Climate” in which it claims to set “very ambitious goals” and structurally embed sustainability in its operations. Particularly, the university is “aiming for a top 10 position in the Green Metric University ranking”. In doing so, it wants to reduce the CO2 footprint of business trips to zero by 2027, generate its own energy, and purchase and cater “the most sustainable products”. Tilburg University adds that sustainability also needs to

be reflected in research and education, but does not provide any concrete examples here, instead of referring to its educational profile, hinting at a connection to the Sustainable Development Goals, and a (to-be-published?) Sustainability Plan for 2027. Some of the promises are already quite concrete – like net-zero by 2027 for business trips and generating its own (we suppose renewable!) energy. But in many respects, the 2027 Strategy provides much more ambiguities than clarity and leaves us with many questions. For instance, the reference to the Green Metric University ranking. As many scholars in different research areas are aware – notwithstanding their personal experiences with all kinds of (personal) rankings and indices – any ranking inhibits the danger of box-ticking. To make sure we know what we are talking about (as befits good academics), we explored the Green Metric University ranking. What stands out is that of the Dutch universities, Wageningen, Groningen, and Leiden are already in the latest top ten. Tilburg University is currently at place 78 globally and at place 34 among all European universities. The ranking is based on six pillars, including the university's 1) setting and infrastructure (for instance, total campus area covered by plants), 2) energy and climate change (for instance, the number of renewable energy sources), 3) waste (for instance, whether there is a recycling program for the waste), 4) water (for instance, whether there is water recycling), 5) transportation (for instance, the relative number of vehicles on campus), and 6) education and research (for instance, the relative share of courses and research on sustainability). Whereas this all sounds quite plausible, we were quite surprised that education and research form only one of the six aspects and only counts for 18%, which is the same weight as the component 'transportation' receives. Clearly, research and education are at the core of the important role a university has in society. Of course, a sustainable campus is important as well and should reflect the values of a Sustainable University, but focusing on a score that focuses for 80% on this aspect, may very well bring Tilburg University in the position of hitting the target but missing the point.

Our advice would be to use a holistic approach that includes all important aspects of a Sustainable University – in any case research, education and the organizational structure – in Tilburg University's strategy to become a Sustainable University. To this end, in the next sections, we highlight some further findings and observations related to sustainable research, sustainable education and a sustainable organizational structure.

Sustainable Research

Some argue that a university should take a stand on societal issues that they deem essential to the world's future whereas others maintain that the university should remain 'neutral' value. It is certainly true that the university as an institution must exercise a degree of institutional restraint as its academic staff needs a maximum degree of freedom to remain at the forefront of cutting-edge research: a university that will impose a (strict) research program will always be less advanced in its output than its competitors. It is clear to us that a university's core task is to foster the ability of its academic staff to conduct truth-seeking research.

By choosing 'Understanding Society' as its mission statement, Tilburg University has expressed its ambition as an institution to be part of society and conduct research that has societal relevance without expressing *how* or on the basis of *what* values it wishes to make that contribution. It is however evident that the university is a value-laden institution. For example, we adhere to scholarly principles when ranking arguments, articles, and student's exams as we are dependent on these for our credibility as a university. Other values – among which a commitment to sustainability – are incorporated in Tilburg University's statements and strategy documents as we have just discussed. These institutional values are important as they can guide how we work and protect long-term processes. The question that we want to table here is if Tilburg University should not change its mission statement to 'Understanding a *Sustainable* Society'. Some people again would find this too bold and not neutral enough, but does that position really stand?

Making a real commitment to sustainability could hardly be considered controversial given the scientific evidence of its relevance. For example, among economists, it has now become mainstream to include the costs and benefits for nature in an economic analysis (E.g. Daly et al, Raworth). Similarly, when public figures persistently disregard moral, scientific, legal, or historical truths (about e.g. climate change), academics have a responsibility to speak out. Moreover, on its 'Towards a Sustainable University' webpage, Tilburg University already identifies sustainability in research as an important pillar, with the goal to "aim to better understand international, regional and local sustainability problems and develop knowledge to arrive at solutions".

Waas, Verbruggen and Wright define research for sustainable development as "all research conducted within the institutional context of a university that contributes to sustainable development" (Waas et al., 629-636). This broad notion of sustainability

is also adopted in the UN Sustainable Development Goals. Tilburg University in particular seems to fit well within this definition with the projects it highlights on its website, including the Zero Hunger Lab, the SMILE (Social Innovation Labs Energy Transition) project, the life on land research, the Constitutionalizing the Anthropocene project, to name but a few. The university can hence rely on an impressive and proven track record in the field of sustainability research. In part this is institutionalized in a specialized multidisciplinary Tilburg Sustainability Center (TSC). TSC has a clear focus on climate change, environmental economics, corporate social responsibility and sustainable investment, which aligns perfectly with the EU's (and its research programs) explicit quest for 'social innovation' to achieve the transition towards a sustainable, innovative and competitive society.

Hence, by adopting a new mission statement Tilburg University shapes and distinguishes its identity as a university that commits to a sustainable future. In times of crisis as we are currently experiencing, such a commitment to a long-term principle can guide us, and protect us against the imperious time of the moment.

Sustainable Education

While prestigious projects in sustainability are highlighted on Tilburg University's website, it remains rather silent on education. In the summer of 2022, the website "Towards a Sustainable University" was apparently adapted, without mentioning education or providing an overview of courses in the field of sustainability anymore.³ There exists however a national website called "duurzamestudies.nl", showing only two programs from Tilburg University: the 'Msc Economics: Sustainable Development' and 'Msc Organizing for Global Social Challenges', both tracks of existing Master's programs. A quick search in the Osiris Study Guide for 2022 shows us that 16 courses are found when searching for "sustain" in the course section. Another one pops up when searching for the word "duurzaam". Although we have to admit that our search was rather limited, we highly doubt whether these 17 identified courses offer a complete picture of the university's sustainability courses.

One of the programs with a focus on Sustainability Tilburg university does offer is the optional minor is "Law and a Sustainable Future" for students that are in the third year of their Bachelor's program at Tilburg Law School.⁴ This minor enters its

³ Before this change, the path <https://www.tilburgUniversity.edu/about/profile/sustainability/education> showed a patchwork of some sustainability courses at the different faculties.

⁴ Both authors of this essay are affiliated with the Minor.

third year in the 2022-2023 academic year and, before its introduction, we needed to present our proposal for the minor to a student panel to test if it did actually spark interest of our target group. As we enthusiastically presented, the students were much more reluctant in their response. Certainly, there were students that immediately embraced the courses, and the ideas on which the program was built but at least half of the eight-member panel remained on the fence. Asked for their opinions, one student responded that the minor sounded “rather normative, and not very neutral”. When asked to elaborate on what this meant, the student compared it to the other new minor that also had been just presented (consisting of courses on criminal, administrative and civil law) which he deemed much more “objective and neutral”. Another student expressed concern that it would be “too specialized” because the student had – understandably – not yet selected any field of interest within the broader Dutch law program. Our response to the concern of the last student was easier: as sustainability affects all aspects of society, all kinds of lawyers are needed to respond to legal sustainability issues, from public lawyers working in Government positions to business lawyers working for big companies dealing with for example consumer demands, competition issues or investment decisions. Sustainability has for better or for worse become mainstream, and this is more and more reflected in the job market.

The concern of the first student, however, puzzled us. How, we asked, is criminal law not normative and based on values that are typical for the moral culture of a jurisdiction? The choice to de-criminalize euthanasia is made in the Netherlands on the basis of respect for human dignity, whereas in the UK human dignity is used as a basis to criminalize euthanasia. And what about the recent abortion verdict of the US Supreme Court? The complete opposite interpretation of the concept of human dignity makes apparent how subjective the concepts are on which we base our laws. Of course, the student just expressed his training as a law student. We – and any other law schools in the Netherlands – are mostly busy transferring knowledge on law as it is, without questioning the values and the choices that underpin those laws, and legal decisions. We suspect that this may not be very different for most other disciplines that Tilburg University harbors.

That the university does have ambitions to not only deliver graduates that are good economists, lawyers, sociologists, etc., but also responsible citizens and professionals becomes clear when reading its teaching profile (Tilburg Educational Profile, or ‘TEP’). TEP focuses on “Skills” and “Character” in addition to “Knowledge”. Character includes the following elements: intellectual independence, critical

mindset, social responsibility, scientific responsibility, and entrepreneurship.⁵ Integrating sustainability as a core concept of our values and our university could at the very least make students more aware of the choices we as a society face and make. Our proposition to change Tilburg University's mission statement into "Understanding a *Sustainable Society*" would not only commit the university to a sustainable future in terms of research but definitely also its education profile. It, therefore, strikes us that whereas for instance entrepreneurship is explicitly addressed as part of TEP's Character trait, sustainability is not mentioned at all. Or would "social responsibility" perhaps allay our concerns and hide a focus on sustainability in Character after all? This concept is explained as "students are professionally honest and socially committed. They make conscious choices, as professionals and (world) citizens, taking into account the consequences of these choices for others and for society". Although this links to some of the social aspects of sustainability, it does not fully capture the importance of sustainability. We, therefore, would propose to either add a new character to this list or change social responsibility in "students are professionally honest and socially and sustainably committed. They make conscious choices, as professionals and (world) citizens, taking into account the consequences of these choices for others and for a sustainable society".⁶ TEP also highlights the importance of philosophy courses in Tilburg's Bachelor's programs: "In order to work on character building, academic teaching should have a broader aim than purely the transfer of knowledge of a particular field. This idea goes back to the founding principles of our institution. The central position of the philosophy courses in our Bachelor's programs remains an important prerequisite".⁷ These philosophy courses need to let student question the values and the choices individuals and our society make. Would the time not be right for Tilburg University – as a university that aims at understanding society including its values and choices – to add not only a requirement for philosophy but also sustainability courses for all its programs in an integrated manner? The university plays a fundamental role in how students perceive the world and the important choices and challenges related to this perception. As coined in its 2027 Strategy, the university aims at impacting "the mindset of tomorrow's leaders [...] nourished from a broad sustainability perspective". Let us do this, not only via the commitment of the proposed mission statement but also through integrating sustainability in educational programs. Preferably taking a holistic approach in which sustainability is considered a general principle that is addressed in a variety

⁵ <https://www.tilburguniversity.edu/intranet/education-support-portal/tep>

⁶ The underlined words are added.

⁷ <https://www.tilburguniversity.edu/intranet/education-support-portal/tep>

of courses from multiple angles, but in any case offering at least one sustainability course to every student.⁸

Our Osiris study guide search signals that various schools at Tilburg University pay attention to sustainability in their education. But at the very same time, it highlights that sustainability is not yet one of the priorities in Tilburg University's education. And, for a future-oriented student eager to learn more about sustainability, it is very hard to find suitable courses. A labeling system for sustainability courses and programs can be used so that it is clearly signaled when courses have a focus on sustainability. The University of Gothenburg's system is only one example that Tilburg University can draw from.⁹

Sustainable Organizational Structure

The organizational structure should in any case facilitate and reflect the university's sustainability goals. As we have seen in the various examples of this short essay, there is a large focus on Tilburg University's physical infrastructure when it comes to sustainability targets. We already mentioned the university's ambitions for the Green Metric University ranking. In addition, the university has set the ambition to stop using fossil fuels for energy purposes by 2025.¹⁰ Like in other universities, over the past few years, its focus has been on academic air travel as an important source of carbon emissions. The 2019-2021 Sustainability Plan recognizes that "scientific personnel, in particular, are frequent flyers in the context of education and research. The size of the associated burden and how it could be reduced will be examined. The primary objective is to reduce the number of journeys. If travel is necessary and alternatives (e.g., video conferencing) cannot be chosen, standard burden compensation may be considered". Tilburg University took some measures to reduce these carbon emissions, including not allowing its employees to travel by air to destinations within a 500 kilometers but at the same time experience tells us that it remains difficult or even impossible not to fly (but take a train) to destinations *further* than 500 kilometers with the current contracted travel agency. Probably worthwhile for Tilburg University to review current and future contracts with the travel agency to ensure access to sustainable travel options?

⁸ One may note that the 2027 Strategy, suggests this for digital sciences, offering "a basic course in digital sciences for every student, possibly an interschool program". From this one may derive that digital sciences are considered more important in education than sustainability.

⁹ See <https://www.gu.se/en/study-in-göteborg/study-options/sustainability-labelled-programmes>

¹⁰ <https://www.dejongeakademie.nl/publicaties/2015998.aspx>

Of course, a sustainable organizational structure is more than net-zero business flights. If the university indeed wants to aim at a higher score in the Green Metric University ranking, even when pursuing box-ticking, it will probably end up with a fairly 'green' campus. This is also shown by ambitions formulated in the Ambition Document of 22 June 2022. But we also see other possibilities that perhaps have not yet been considered. Sustainability includes various important aspects, and for example, Tilburg University's tax experts will immediately point to the importance of sustainable taxation as part of sustainable businesses. As Rutger Bregman rightfully told the elite at Davos in 2019: "1500 private jets have flown in here to hear Sir David Attenborough speak about how we are wrecking the planet. I hear people talking the language of participation and justice, and equality and transparency, but then almost no one raises the real issue of tax avoidance, right? And of the rich just not paying their fair share. It feels like I am at a firefighters conference and no one is allowed to speak about water". Take for example Starbucks. One of our colleagues, professor Hans Gribnau (2017), duly notes that Starbucks claims to show concern for society and to have internalized external interests, viz. the interests of society at large. What Starbucks forgets to mention is that it engages in tax avoidance and evasion. For instance, in March 2022, The Guardian headlined that "Starbucks pays just £5m UK corporation tax on £95m gross profit". While many students and colleagues on our campus probably enjoy the (fair trade) coffee, what about a small local coffee shop instead? Combined with Books 4 Life, coffee, and books, wouldn't that sound like a plan? The Books 4 Life shop, that is currently hidden in the basement of the Cobbenhagen building, sells donated second-hand books and all proceeds go to charity and deserves a spotlight location showcasing the values we care about. Other obvious examples would be the procurement of (a predominantly plant-based and local) catering business, a green travel agency, and other facilities.

These are just examples: the bigger picture is important here – as an organization, a Sustainable University needs to make well-considered choices in their business

relationships, including its relationship with large financial institutions and investment policies and account for them.¹¹

Our Recommendations

In the previous sections we explored various aspects of a Sustainable University and to what extent Tilburg University meets its ambition to be one. Human activities are the greatest threat to a sustainable world, but at the same time, it is also humankind that has the power to reverse this. The university has an urgent important social function, and therefore bears the responsibility to take a pioneering role, all well beyond a green physical campus and net-zero business trips. We highly support that Tilburg University wants to become a Sustainable University and would like to provide the following recommendations and guiding principles that will hopefully inform and foster its road towards it:

- Tilburg University’s mission statement should be updated to “Understanding a Sustainable Society”.
- Choices must be made to focus on specific aspects consistent with the (vocabulary of) broad concept of sustainability that includes all facets of the notion of sustainability. Sustainability research of Tilburg University’s researchers (including TSC) can continuously inform these choices, simultaneously making sustainability research more visible inside and outside the university.
- In determining those choices and related ambitions and actions at the core of Tilburg University’s societal role as a university, a Sustainability Committee has to be installed that consists of members with a broad range of backgrounds in sustainability, including students, academic and non-academic staff members, and external stakeholders. The Committee should ensure Tilburg University’s consistent and university broad sustainability agenda and should monitor its implementation.
- Explicitly integrate sustainability in TEP, truly reflecting the Tilburg University’s ambitions to become a Sustainable University. In line with the university’s

¹¹ Note that in the spring of 2019 there was a discussion about inviting Shell and ExxonMobil to the Economic Business Weeks Tilburg. Students who were upset about the platform given to CO2 majors protested. We definitely do not advocate avoiding any conversation with these companies and refusing them access to campus, because we believe that dialogue is an important part of the road to a more sustainable society. However, it could be a consideration for TiU to have guidelines for employers who have privileged access to the campus and the student and faculty bodies. For the discussion and protests in 2019, see: <https://universonline.nl/nieuws/2019/04/08/actiegroep-wil-dat-universiteit-shell-en-exxonmobil-van-de-campus-weert/>

philosophy courses requirement, a central position for sustainability in education is welcomed.

- To guide students as “tomorrow’s leaders” a labeling system for sustainability courses and programs can be used so that it is clearly signaled when courses have a focus on sustainability. The University of Gothenburg’s system is only an example that Tilburg University can draw from.
- Tilburg University’s ambition for the Green Metric University ranking can be supported if it is understood that only a green campus does not make a university sustainable and the experiences of employees and students with the ease and ability to make sustainable choices at the university are taken into account.
- As a Sustainable University, Tilburg needs to make well-considered choices as regards its business relationships and investments.

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Teaching Values to Tomorrow's Leaders: Educating Responsible Citizens

Tine Buyl, Anton ten Klooster

Already in the mid-19th century, in his books and lecture series *The Idea of a University*, the theologian and scholar John Henry Newman reflected on what a university can and should be. One of these lectures places the emphasis on the “real teaching” that takes place within the community of students. To Newman, this “at least recognizes that knowledge is something more than a sort of passive reception of scraps and details; it is a something, and it does a something, which never will issue from the most strenuous efforts of a set of teachers, with no mutual sympathies and no inter-communion, of a set of examiners with no opinions which they dare profess, and with no common principles, who are teaching or questioning a set of youths who do not know them, and do not know each other, on a large number of subjects, different in kind, and connected by no wide philosophy three times a week, or three times a year, or once in three years, in chill lecture-rooms or on a pompous anniversary” (Newman, 2014 [re-issue], 116).

We can take this description as the terrifying photo-negative of what a university should be, and a warning of what it can become if it is interested solely in being “an industry churning out diplomas”, as the *Tilburg Educational Profile* (TEP) describes it. This negative also gives us the key to the positive. It gives us insights into what a good university *should* have in terms of teaching: it needs teachers who feel connected with each other, with their students, and with the university, and who are free to have and express opinions, based on shared common principles. It also needs a student body that knows each other and feels connected with each other, their teachers, and the university. The role of the university in this respect would be to provide both teachers and students with a set of common principles – *values* that they can strive to reach and use as a basis to create a community and connect with each other. These values should not only be formulated in the university’s vision and mission statement, but they should also become evident in everything that the university does. Values should provide a foundation for the content and practice of our teaching, but they should also be recognizable in the way the university treats its staff and students.

As we can read in the new strategic plan and the TEP, Tilburg University is firmly committed to such a positive vision. Values are at the heart of its strategy. The four keywords in the new strategic plan – curious, caring, connected, courageous – are presented as “values [that] will enable us to tackle the rapidly changing and challenging world”, and that “guide our actions, our choices, our individual and collective responsibilities, and our future”. In the same vein, the TEP is built on three pillars: Knowledge, Skills, and Character. This means that our teaching should not only be about transferring knowledge to students and developing their skills but “character building” is also seen as essential in equipping our students to contribute to society.

Against the backdrop of Newman’s warning, this is indeed the type of approach one would hope for. If we want to contribute to developing such values and building students’ character, however, we need to be aware of the underlying assumptions and questions. Two major assumptions are that (1) formation of a person’s character is possible, and that (2) the university should contribute to this. Some would argue against the latter, saying that university should be all about acquiring skills and knowledge (only). That Tilburg University, with its new strategy and with the TEP, explicitly chooses instead to set out to develop thinkers of character is, to us, an expression of the fact that our institution understands its role in society and takes responsibility for it. Now, we just need to make sure that as an academic community we practice what we preach.

The Flawed Idea of the *Homo Economicus*

‘Practicing what we preach’ seems obvious and easy enough, but in practice, it is not as simple as it appears. Take the example of teaching in the field of management. For some time now, several of the main theories guiding management research and education have been under fire, for instance by the late Sumantra Ghoshal in his celebrated essay *Bad Management Theories are Destroying Good Management Practices* (2005). In particular, the views of the Chicago School have received their fair share of criticism (see also Gersel & Johnsen, 2020). The Chicago School essentially reduces an organization to a bundle of purely market-based processes, and a manager to a rational decision-maker (*homo economicus*), driven by self-interest. Its most renowned alumnus is probably Nobel Prize winner Milton Friedman, who famously argued that the only social responsibility of managers should be to maximize profits for shareholders (Friedman, 1962). All of this is clearly not in line with, for instance, Tilburg University’s desire to educate “responsible people of character”.

Still, despite these critiques, many of the most prominent management theories we teach to our students even today – such as agency theory, transaction cost theory, resource-based view of the firm, and competitive strategy – are, in essence, based on the assumption that (shareholder) profit is the highest good and managers (should) act as rational *homines economici*. As such, these ideas become self-fulfilling (Ferraro et al., 2005) and destroy “good management practices” (Ghoshal, 2005). Stepping away from these theories is, however, not that straightforward. Though several scholars have tried to address these issues in the last two decades, currently we still do not have viable alternatives readily available. Going from a “theory of the firm” with relatively simple foundational assumptions to a new set of theories based on ‘thick ethical concepts’ and difficult-to-quantify principles is no easy feat (Gersel & Johnsen, 2020) – it implies re-thinking theories and basic assumptions we have been counting on for decades. However, if we are serious about teaching values to tomorrow’s leaders, we will need to take action.

Ethics Takes More than a Course

A number of responses are possible to this need to “do ethics” – not just for management education, but more broadly for all university educational programs. As indicated above, some will feel that ethics may be relevant, but they are also the responsibility of individuals, who are, e.g., bound by their organization’s code of conduct. They may argue that a university is a place to acquire knowledge and skills, but not to form character. As we stated above, we are pleased that Tilburg University has already opted for the opposite direction and put “character building” of our students central in the TEP and its strategy. The question remains, though, how to precisely do this. How can we ensure that we, with our educational programs, shape our students into socially responsible human beings, who value courage, curiousness, care, and connectedness?

University leadership bears an important responsibility in this. One way they could attempt tackling this issue would be by adding ethics courses to the curriculum. However, bringing down the important question of character building and developing students’ “ethical compass” to such an “add-on” to the curriculum (Van Stekelenburg et al., 2021, 100) would be a form of “tokenism”, which will not suffice in reaching our goals (Ghoshal, 2005, 88). To form thinkers of character is a much more formidable challenge.

Acting from Shared Principles

What we do need, is a university that walks the talk – a university with clear core values and shared ethical principles, which are visibly reflected in tangible actions. In other words, if a university is to form students so that they become responsible citizens, it is necessary that it is itself a responsible organization, as a whole, and its members. In terms of teaching, as mentioned above, an ethics course may be a good start, but is not nearly enough. Frankly, if we want to send students, who will be tomorrow’s leaders, into the world with a clear conscience, we can’t *not* prepare them for all the challenges and dilemmas that await them. Because the world continually changes, this cannot be done with a single course, but it requires a true human formation.

Developing new or carefully rethinking old theories, based on values, may be a long-haul work. However, there are already things we, as teachers, can do in the short term to instill students’ critical mindset and prepare them to tackle challenges and dilemmas which they may encounter in their professional life after graduating. We can clearly visualize the assumptions that are the foundations of the theories we teach – be open and transparent about them – and provide alternative lines of thinking based on values of sustainability and societal responsibility – “thick ethical concepts” whenever possible. Making students aware of the – sometimes flawed – foundations of their knowledge is already an important first step.

What we teach matters, as does how we teach. Drawing from Newman’s *Idea of a University*, teaching at a university should happen among people (students as well as teachers) that *know* each other, that interact and connect with each other. This is especially true for teaching (based on) values. To be effective, such values need to become *shared* common principles among all the university’s members. This implies that the university needs to give teachers, and students alike, a platform to discuss these values freely and openly. Teaching should be active and interactive, in dialogue. With “connected” as one of Tilburg University’s core values, such dialogue and interaction should be at the heart of how we teach.

Apart from the content and practice of our teaching, the university’s organization itself also needs to reflect its values. For a long time, the master – or professor – was indeed seen as the main example in the student’s formation (Prairat, 2012, 20). Hence, a university cannot effectively educate students on sustainability if it does not act in a sustainable manner itself. A university cannot convincingly teach the value of human labor if it systematically overburdens its own staff. A university

cannot possibly foster a culture of respect if it rewards only research output and shows little interest in what relations “successful” researchers have with their students and colleagues.

And that is where it becomes more troublesome. All of this, in theory, nicely fits into Tilburg University’s new strategic plan, especially in its commitment to the new *Recognition and Rewards* approach to evaluate staff. However, in practice, many still hesitate to follow up on this new approach, because it calls for appreciating non-quantifiable factors and the use of apparently unclear and difficult-to-define criteria to evaluate staff members’ contribution to the education process. They remind us of the management scholars who have a hard time stepping away from simple and clear criteria based on the idea of the *homo economicus* and shareholder profit maximization. Thus, the university’s leaders will need to get serious about the actual implementation of this new approach. They need to practice what they preach, walk the talk, put their words into action.

Serving the *Animal Sociale*

Going back to “character building” of our students, the key to this formation is *responsibility*. It carries in it the notion of responding-to (cf. Prairat, 2012, 21). Students, especially in their professional life after graduating, will need to respond to unexpected situations, moral dilemmas, and existential questions. To prepare them for this is a much greater challenge than conveying knowledge or training skills. It requires an idea of what a person is and what that person’s place in the world is. Our university has a tradition from which it can draw, the Catholic intellectual tradition, that itself is enriched by many great schools of thought. Within this tradition, virtue ethics has offered one of the more promising accounts of how to overcome our inability to speak about values and character (MacIntyre, 2011).

Virtue ethics is a tradition that allows for the prudential judgment of professionals. It does not impose *a priori* norms of justice although it can certainly function within a framework of values. But it teaches one above all how to seek justice in today’s world, and to persist in the good. While we may not always agree on what constitutes the virtuous mean, we can be united across disciplines in our pursuit of it. In the management field, we might reflect on what makes corporate profits “fair” and organizations’ relations with and treatment of specific stakeholders “just”. A virtue ethics approach would understand freedom in a positive sense: it is the context in which one can flourish. This conception of freedom is radically different from notions of freedom that promote an “unencumbered self” that best functions

if it is rid of structures that bind it (Snead, 2020, 76-77). In that sense, the approach we propose is a critique of some modern ideas of the human person.

University should challenge in words and actions the liberal paradigm that everyone can and should fence for themselves. We are social animals rather than *homines economici*. As the English poet John Donne famously said, “no man is an island entire of itself; every man is a piece of the continent, a part of the main”. If the Covid lockdowns have made anything painfully clear is that we do not thrive as individuals existing alongside each other, we flourish when we can meet and interact with each other. This insight calls for the formation of different values (cf. Goshal, 2005). Against self-interest, we should place the charity that outlasts everything. Against technocratic pragmatism, we should foster the prudence of real people. Over ideology, we prefer reality. And we serve not the *homo economicus* but the *animal sociale*.

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Being a Good University in Times of Dataism

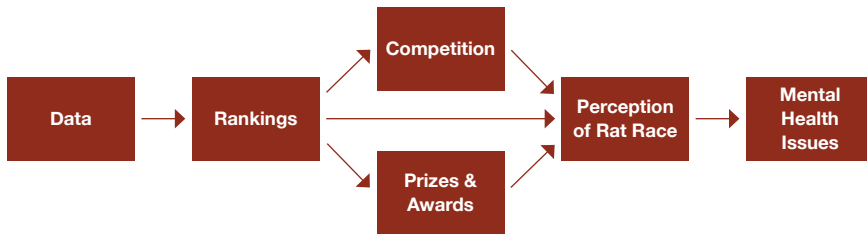
David Peeters

We live in a time of unprecedented quantification. Advances in digital technology allow individuals to almost effortlessly track the number of steps they take each day, the number of hours they sleep each night, and the number of people that viewed and liked their holiday selfies on their social media profiles in the meantime. Also, universities, individual scholars, and academic gatekeepers such as scientific journals have a tendency to increasingly quantify behavior and performance by collecting and displaying data. Metrics show how often a given scientific article has been downloaded, shared, and cited. Students are asked to quantitatively evaluate their lecturers' teaching performance. Universities track how many international students each teaching program attracts. This widespread belief that everything can or even must be reduced to ("objective") data has been termed *dataism* (Rasch, 2020).

Once such data is available, it is only a small step towards organizing the data in the form of rankings. Which lecturer received the highest teaching evaluation scores? Who attracted most external funding? Which university department has the highest average *h*-index? Which articles are cited most, and who publishes most often in journals with the highest impact factors? Inevitably, the presence and availability of rankings will subsequently lead to competition, particularly in an environment in which permanent positions and opportunities for promotion are scarce. At the same time, the ranking of quantified performance – when viewed through the lens of competition – allows universities to provide their students and employees with awards and prizes: there will be a teacher of the year award, an outstanding student award, or a prize for the most talented young researcher.

The omnipresence and assumed importance of data, rankings, competition, awards, and prizes may lead students and young academics to believe they are unavoidably taking part in a rat race. This perception is reinforced by trends in society as a whole, where intrinsically non-competitive activities such as dancing, making music, and even baking cakes or playing with Lego bricks are presented in quantifiable and competitive formats in television shows, while also online social media continuously quantify and display posts and profiles in terms of their *numbers*

of elicited views, likes, followers, and shares. It is perhaps not surprising that in this overall societal and academic climate at least half of all students and young academics indicate to suffer from mental health issues such as stress, unhealthy pressure to perform, anxiety, and sadness (Levecque et al., 2017; RIVM, 2021). The multifaceted relation that can be assumed between the omnipresence and perceived importance of numeric data on the one hand and downstream mental health consequences in students and academic staff on the other is represented visually in what I will coin the Twenty-First Century Rat Race Model (Figure 1).



The Twenty-First Century Rat Race Model. The omnipresence of data and their use for rankings and competition purposes may lead to mental health issues down the line, in turn leading to reduced quality of teaching, research, and public outreach.

Now, what does a good university look like in this current age of quantification and dataism? If we assume the Twenty-First Century Rat Race Model to be correct, universities – by the data they collect and display, the rankings they adhere to and promote, and the competition, prizes, and awards they initiate – may influence the mental health of their students and staff. In the remainder of this essay, I will argue that they should therefore base their policy and practices on the outcomes of scientific research.

Data, Numbers, and Quantification

Many domains of scientific inquiry – from experimental psychology to econometrics, from artificial intelligence to anthropology – rely on the collection, analysis, and availability of data. However, not all data necessarily deserves to be collected. A case in point where the mere act of data collection leads to scientifically proven adverse effects are the so-called *student evaluations of teaching*. In many universities, it is common practice that students quantitatively evaluate a course they took and its teacher via an anonymous survey distributed at the end of the course. A recent systematic literature review on the value and validity of such quantitative student evaluations of courses and teachers indicates that these

evaluations are consistently biased. Female teachers, academics of color, and lecturers who teach in their non-native language on average receive lower scores and more abusive (e.g., racist and/or sexist) comments from students, irrespective of their actual performance, compared to their male, white, and mother tongue speaking colleagues (Heffernan, 2022a). Such abusive comments and flawed ratings not only impact academics' career progression, as teaching evaluations are often taken into account in decisions on academic promotions, but also have negative effects on teachers' mental health (Heffernan, 2022b). As such, the case of student evaluations indeed confirms the possible relation between the availability of certain types of data and its downstream mental health consequences (Figure 1).

Student evaluations are not only biased but also unreliable, as teachers may strategically steer them in a desired direction. Results from a randomized control trial indicate that when teachers provide their students with chocolate cookies during a class, student evaluations of both the teacher and the course material are significantly higher compared to the same class taken by a matched control group of students that did not receive any cookies (Hessler et al., 2018).¹ Perhaps most strikingly, it turns out there is no relation whatsoever between student evaluations and how much students actually learned (Uttl et al., 2017). It is therefore surprising that universities actively facilitate quantitative student evaluations of teaching and take such intrinsically flawed measures into account when deciding on academic promotions and hiring. Indeed, "no university [...] can declare to be a gender equal employer or have an interest in growing a safe, inclusive and diverse workforce if they continue using [quantitative student evaluations of teaching] to evaluate course and teacher quality." (Heffernan, 2022a, 152).

Unfortunately, the student evaluations example is not an exception to the university policy and practice of ignoring scientific evidence. For instance, we know that grading written exams anonymously (i.e., without knowing which exact student provided the answers one is grading) reduces unfair biases in assessment and is easily implemented (Malouff et al., 2013). Nevertheless, it remains common practice for students to be required to write their name - rather than, for instance, only their student number - on their answer sheets.

¹ It remains to be seen whether these results generalize to other types of cookies.

Rankings and Competition

Data can often be ranked, and rankings seem to have entered our lives to the extent that we no longer seem to even question their presence, their premises, and the consequences they have for our mental health (Brankovic, 2022). We look for rankings when booking a hotel, picking a restaurant, or buying a new laptop online. Within this broader societal frame, it is not surprising that universities find themselves ranked as well. Tilburg University, for instance, is ranked number 37 in the world according to the *Times Higher Education World University Ranking* when it comes to Business and Economics (Times Higher Education, 2022).

Being in a high position on an international university ranking may become important when potential students – who by their choice of where to study provide universities with financial resources – use such rankings to decide where to study. Not surprisingly then, universities have started installing *rankings officers* who dedicate their time to finding ways to improve their university's ranking position, and even whole *rankings management departments* have started to appear within universities (Chun & Sauder, 2022). Indeed, securing a high position in international university rankings is a form of academic capitalism that has become part of the present-day university's business model (Groen, 2020; Van Houtum & Van Uden, 2020).

Similar to student evaluations of teaching, however, research has shown that university rankings are intrinsically flawed (e.g., Gadd, 2021; Vernon et al., 2018). These rankings strongly rely on how often scholars at universities get cited, while we know that the number of times a work is cited does not necessarily reflect its scientific quality (Selten et al., 2020). For instance, works published in languages other than English typically get cited less than output of a similar quality published in English, disadvantaging academic domains (e.g., the Humanities) and universities (e.g., in the Global South) that have a tradition of publishing in languages other than English (Van Leeuwen et al., 2004; Van Raan, 2005). Furthermore, we know that citation counts are biased in that articles with a male first author typically receive more citations than articles with a female first author (Larivière et al., 2013), while male academics also cite their own work 56% more often than female academics do (King et al., 2017).

Next to citations, international university rankings typically rely on vague and biased variables such as a university's *reputation* (Selten et al., 2020). Indeed, when reputation becomes more important than actual academic quality in

securing a position on a ranking, universities may be tempted to devote staggering amounts of tax money to marketing and communication strategies, rather than spending it on increasing the quality of research and education itself. The focus on rankings that universities display in their external communication, for instance in self-congratulatory messages on platforms such as Twitter and LinkedIn and on dedicated web pages, contributes to creating an overall climate in which the university as employer seems to reinforce the notion and the perception of being in constant competition. This undoubtedly will not have a positive impact on the mental health of their students and staff.

Again, the university rankings example is not an exception of academic practices ignoring scientific evidence. Also grant proposals submitted to acquire funding for academic research are typically ranked by funding agencies when a decision is taken on which proposals will receive the funding, based on reviewers' evaluations and evaluation scores that are found to be highly subjective and unreliable (Pier et al., 2018).

Prizes and Awards

If a university's reputation becomes more important than the actual quality of its scholarship and education, this requires universities to be visible in the most positive way, online and offline, within society. Besides communicating about an improvement of a university's position on an international ranking of their liking, *prizes and awards* given to academics are the perfect excuse to send out a positive news message and strengthen the university's reputation. And indeed, one sometimes gets the impression that universities decorate some of their own staff members with medals and awards just to be able to communicate to the external world that it houses prize-winning employees.

Intuitively, academic prizes and awards seem a positive feature of the system – they may be conceived of and framed as a well-deserved acknowledgment of the laureate's contribution to research or education, providing the recipient with a motivational impulse to continue their undoubtedly groundbreaking work. What is often not considered, however, is that the mere presence of prizes and awards in the system reinforces the perception that academics are in competition with one another. Is it worth awarding one or a small group of individuals a prize, if that comes at the expense of reinforcing an overall competitive climate in which there are a couple of winners (of a prize, award, funding) and a large majority of non-winners? In fact, in line with the Twenty-First Century Rat Race Model introduced

in this essay, the intuitively positive gesture of awarding a certain prize may in practice actually contribute to establishing or maintaining an overall climate of competition that induces stress and other commonly and increasingly observed mental and psychosomatic health issues in (young) academics.

Finally, perhaps no longer surprisingly at this stage, decisions on who will receive a certain prize or award are typically biased, in that “adjudication committees, ranking advisories and the leadership of top-ranked institutions form an echo chamber that conflates academic excellence with being white, male, wealthy, and famous” (Stack, 2020, 4). Despite any good intentions, award committees are commonly biased to select prize-winners that have a background similar to their own (Stack, 2020). In line with the well-known Matthew-effect, awards and prizes may subsequently actually reduce the visibility of those academics and their work that do not fall within this privileged group (Merton, 1968), thereby also unjustly influencing the chances of who will receive any future award or scientific funding (Bol et al., 2018).

Conclusion

So how to be a good university in times of dataism and quantification? For one, universities may be expected to base their policies on scientific facts. If quantitative student evaluations of teaching are evidently biased and invalid, universities should develop alternative measures of assuring high-quality education. If international university rankings are intrinsically flawed and unscientific, universities should have the courage to actively oppose rather than reinforce them. If mental health problems in young academics and students are at an unprecedentedly high level, universities should seriously analyze the broader societal climate they are part of and consider setting a different example. When universities continue to ignore the scientific evidence around these matters, how can they expect society at large to take other scientific findings seriously?

If the analysis presented in this essay is correct, turning the university into a healthier environment for students and staff requires a substantial change in culture and policy. Rather than focusing on the treatment of symptoms (e.g., stress, anxiety, etc.) via psychological support (e.g., mindfulness training), the overall academic and societal climate in which these symptoms surface require in-depth analysis and opposition. It is not unlikely that the present relatively young generation of academics, who grew up in the current societal climate of dataism and competition and often climbed the academic ladder at the expense of their own health, will

need to be given the power, the freedom, and the means to lead this change for it to be effective.

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Caring

Of Caring Connections: Well-Being, Entrepreneurship & Technology

Lien Denoo, Inge van de Ven

Academic careers are uniquely challenging: individuals invest years in getting advanced degrees, such as Master's and Doctoral degrees, after which they typically take on temporary jobs such as postdoctoral fellowships and tenure-track positions. All throughout this time, academics are being evaluated on a plethora of different activities, such as research, teaching, impact on society, leadership (VSNU, NWO, & NFU, 2019) but also others such as fundraising, and training the next generation of academics, in the hopes of ultimately getting a permanent position or "tenure". The general idea behind this principle is that scholars first prove themselves as being good researchers, educators, and employees, and upon tenure, in exchange, will get academic freedom and the liberty to carry out more risky and high-impact projects. Throughout this trajectory, though, academics usually have to relocate multiple times, often to different countries, and have to deal with several challenges, such as uncertainty, and fluctuating workloads and resources.

This all makes a career as an academic an extremely uncertain and challenging endeavor. Many factors that make or break an academic career are (somewhat) beyond the academic's control: papers essential to a scholar's promotion are sometimes rejected after years of working on them, and when trying to obtain external funding – often an important factor in promotion decisions – rejection is usually the norm, rather than the exception. On top of this, academic careers can also bring stress on a personal level, such as long-distance relationships due to having to move around multiple times or postponing having children or buying a house until one gets a permanent contract. And if that's not challenging enough, due to the temporary nature of some academic jobs, such as postdocs, academics often have to spend significant chunks of time on work that benefits their institution more than them: think of having to develop a new curriculum or training junior colleagues in teaching when you know you have to leave the school in the near future anyway. Despite this, the number of doctorates in the Netherlands keeps increasing: the number of submitted PhD dissertations and awarded PhD degrees almost doubled from 1997 to 2019 (data from Rathenau institute (2020, 2021)). At the same time, the number of academic positions is growing at a lower rate, which means that not everyone will get the chance of getting a permanent academic

position (Fischer & Lohner, 2001). Becoming an academic thus increasingly requires courage. In this essay, we reflect on contemporary challenges for the career path of young academics: more specifically, we first take the perspective of entrepreneurial studies to reflect on the uncertain career paths of academics as well as their well-being (Lien Denoo), and secondly, reflect on the role of digital technology and its impact on the careers and well-being of academics (Inge van de Ven). Bringing these perspectives together in our conclusion, we offer several suggestions for Tilburg University to help improve the well-being and quality of life for its academic staff.

What We Can Learn from Studies on Entrepreneurial Well-Being

Few professions are characterized by such extended periods of uncertainty, increasing pressure to manage multiple different sets of tasks and responsibilities, and factors beyond an employee's control, as the academic career path. One other prime example of a career where individuals have to "wear multiple hats", deal with extreme uncertainty for extended periods of time, and ride an "emotional rollercoaster" is entrepreneurship, where peaks and valleys rapidly alternate, and entrepreneurs have to quickly navigate between positive emotions and stressful events (De Cock, Denoo, & Clarysse, 2020; Wach, Stephan, Weinberger, & Wegge, 2021). Uncertainty, high workload and resource constraints make entrepreneurship a stressful career path (Williamson, Gish, & Stephan, 2021): entrepreneurs should keep going when the going gets tough, and suppressing one's emotions may even help their ventures survive (De Cock et al., 2020).

Given this difficult journey where regulating one's emotions is important, more and more research has started to focus on the well-being of entrepreneurs, and deservedly so. The general opinion has shifted from 'entrepreneurs choose to become entrepreneurs, and therefore, have chosen for this uncertain lifestyle' to realizing the importance of entrepreneurial well-being, for both entrepreneurs as well as their ventures and subsequent economic value creation. From an academic point of view, entrepreneurial well-being has become a popular research topic, with increasing practitioner and governmental attention being spent on it since it has been reported that a staggering 72% of entrepreneurs deal with issues related to health and well-being (Al Mansoori, 2022).

Despite this, entrepreneurs are actually quite happy: they have a higher work and life satisfaction than employees and do not experience more negative feelings (Stephan, Rauch, & Hatak, 2022). This means that individuals working

in challenging environments do not necessarily have to be more stressed or have lower well-being; individuals can even thrive from it. What we do know from recent research is that institutional contexts, such as laws, performance-based cultures, and regulation can affect both positive and negative feelings, meaning that they can both enhance or lower entrepreneurial well-being (Stephan et al., 2022). In other words, entrepreneurial well-being is not absolute and can be both improved or made worse by means of the context in which entrepreneurs find themselves. This was confirmed in a recent study on the effect of the Covid-19 pandemic on entrepreneurial well-being: entrepreneurs in countries with more severe lockdowns faced worse business adversity and lower well-being (Stephan et al., 2022).

Moreover, for entrepreneurs whose well-being is challenged, the “three R’s” of entrepreneurial recovery interventions’: *Respite, Reappraisal, and Regimen* may bring relief (Williamson et al., 2021: 1316). Respite refers to interrupting work for tangible and mental relief, such as by spending time in nature, listening to music, or engaging in mindfulness, whereas reappraisal refers to changing one’s perceptions, which can be done with behavioral theory and stress optimization, and regimen refers to adding structure, for example through structured breaks but also through sleep hygiene (De Cock et al., 2020; Williamson et al., 2021). From this, we thus know that the institutional context in which one is active plays an important role, and that respite, reappraisal and regimen are important in sustaining an entrepreneur’s well-being. Translating this to an academic context, universities and higher education organizations should take an active stance in supporting their employees’ well-being, which can be done with one or multiple interventions targeting the “three R’s”.

Managing Attention in an “Always On” Culture

Digital technology has an important role in the strategic plan of our university: as a challenge, a realm of possibilities, a set of new methods, and an object of study in its own right. The shift towards increasing digitalization and datafication transforms our research fields in far-reaching ways, including how we think, how we formulate our questions, and what answers we find. It impacts the ways in which we attend to each other and the world around us, our teaching, managing our careers, and doing research. The implications of the rise of digital technology and datafication are a “mixed bag”, as the Strategic Plan readily acknowledges: “We have to calibrate our way of working in light of new opportunities, such as digitalization and the

wide availability of data and challenges such as the need for cyber security, but also take action against the high workload of staff and students.”

One challenge that lies before us is to rethink well-being, in relation to the digital tools and methods that we use. Can we develop novel ways to use computational approaches to help further goals like equality, diversity, social justice, and well-informed citizens? Related to the three R's, such questions correspond to *reappraisal*.

In addition, digitalization puts new demands on academic staff. The Strategic Plan states: “We believe in the power of connection”, which has a nice ring to it, but it remains unclear what exactly should be connected with what, and what the status of connection is here: is it imperative, is it unqualifiedly positive? Do we have to be connected all the time? In this respect, the core values “Caring” and “Connected” are indeed interwoven, but also have a very real potential to clash. Digital technologies are so entrenched in everyday life that almost all their facets have been restructured around them. Over the past decades, our social, leisure, and work environments have become permeated with technologies operating on wireless network infrastructures, leading to a culture of ubiquitous connectivity.

This “deep mediatization” of life (Hepp, 2019) brings undeniable benefits to our professional and social lives. We can perform our roles, manage our social and professional networks, and access information and services catered to our personal preferences “whenever, wherever”: without time or place constraints (Vanden Abeele, De Wolf, & Ling, 2018). We can supervise students through Zoom, work from home or a coffee shop (or on holiday!), access and consume information instantaneously and on-the-go, et cetera.

Yet, our “always on” culture also comes with individual and societal burdens and challenges, and new responsibilities. Simply put, because there is the *possibility*, individuals are also *expected* to be connected, to be online almost all the time. Being available outside of work hours has normalized, and when tasks do not neatly fit into their allotted time, we have to “take one for the team”. Private and professional lives increasingly bleed into each other, and in both realms, we are always on standby. Constant negotiation of availability is too often delegated to the individual, and the solutions do not always seem clear-cut. Do I decide to take a call from my partner or friend when at work? Do I follow up on work-related emails when on summer holiday with my family? Are there exceptions? The burden of individual responsibility might lead to feelings of doubt and guilt, regardless of the

decisions you make. As a result, many of us are distracted and feel the permanent pressures and demands that this newly afforded connectivity brings about, giving rise to “availability stress”: distress (including guilt and anxiety) that results from beliefs about others’ expectations that one is available through digital media (Hall, Steele, et al., 2021). In other words, the interwoven values of Connection and Care urge us to consider how we further our digital well-being (Vanden Abeele, 2021), and balance between these benefits and burdens of digital technology.

Constant connectivity simultaneously functions as cause and solution for poignant problems in neoliberal societies, like loneliness, distraction, and isolation. A lack of face-to-face contact can cause mental health issues such as anxiety and depression; ubiquitous connectivity can lead to depression, fatigue, sleeplessness, and burnout. Many students, especially international ones, experienced a sense of disconnection and isolation during the Covid-19 pandemic. The new platform Digital Sciences for Society, that aims to use knowledge from digital sciences and social sciences & humanities to solve social issues, and the Digital Education Enhancement Program (DEEP) which focuses on improvements in education through digitization, could be used to monitor employees’ and students’ digital well-being, including mental health.

Besides making caring connections, it is important at times to invest in disconnectivity, including “voluntary psychic, socio-economic, and/or political withdrawal from mediated forms of connectivity” (Hesselberth, 2017: 1995). This includes forms of media resistance (“opting out”) under neoliberal conditions in an always-on culture, and it aligns well with *respite* as one of the three R’s of entrepreneurial recovery interventions. Rather than making the management of (dis)connectivity the responsibility of every single employee, we should think about this in a structural way (by making it part of academia’s *regimen*). After all, disconnecting is needed at times to reconnect: to make new, meaningful connections.

Conclusion

We find ourselves at a critical moment, combating enduring systemic inequality and polarization while we cope with major crises like climate change and the aftermath of the Covid-19 pandemic. On a personal, social, and institutional level, we are compelled to reappraise, to redesign our ways of life. When it comes to managing our professional lives, the Strategic Plan urges employees to “work on personal leadership through self-reflection, self-awareness, flexibility, and taking

responsibility for their own development”. This would mean that, in addition to having to manage stressful careers with the many uncertainties that come with them, academics should also take the burden of their personal leadership on them and find time and effort to take responsibility for their own development.

Instead, in order to truly interweave care of employees with connection, it is necessary for the university to take on a more active and collective role in safeguarding the well-being of both students and employees in times of ever-increasing expectations for academics, including job insecurity, high workload, communicational pressures, and technological demands. It should not put the burden on employees themselves and expect them to arrange this on an individual basis (as Marjolein de Boer explains in her contribution to this volume, this could also reinforce the gender gap), but actively support their personal development and well-being. From entrepreneurship we can take inspiration on how to thrive while working in fast-changing, challenging environments: for this, respite, reappraisal, and regimen should be structurally built into our technological and social infrastructure.

We should strive for innovation, to “do things smarter and differently” but this should never be to the detriment of our overall well-being. On the contrary, we can use our knowledge of the scientific fields of entrepreneurship and digital sciences to solve social issues and improve individual and professional well-being and the good of the university. This might also contribute to a more sustainable society and even guide us to “live a morally good life”, for instance by attending to our local environmental and social ecologies in non-instrumentalist ways (Odell, 2020), in which case reappraisal will naturally lead to a new regimen.

Times of rapid transformation can give us the opportunity to rethink our fields of research and education as well as their main concepts and values. Technology does not have to mean only challenges, but should also be used to improve our well-being. Specifically, we should take inspiration from initiatives like that in Belgium, where federal institutions recently introduced a ‘right to disconnect’. This means that employees at federal institutions should not be called anymore after 17h (5 pm) except in case of emergencies and that employees who do not answer phone calls after 17h cannot suffer any negative consequences or repercussions in the

workplace for not doing so.¹ Interventions like these at the regimen and respite level can directly increase employee well-being. Also, more awareness should be raised for problems related to digital well-being and self-management, like burnout and other mental health issues. A lot should be done to make career paths less uncertain, and the university should actively follow VSNU CAO rather than trying to find ways to bypass it. We could also have a critical look at the ethical implications of the technology we use for our research and how it affects the well-being of others (like using Amazon's Mechanical Turk and other sites that use low-paid labor for survey studies).²

We can communally create a culture in which it is not the norm to work outside of office hours or to answer emails on weekends and evenings, and where it is considered healthy to reduce screen-time and maintain a social life. Clear criteria for academics on temporary, renewable contracts, such as post-docs, may help reduce anxiety and the need to work on weekends in the hopes of getting a contract renewed. Clear time off on the weekends can also contribute to a more positive work-life balance, especially in the cases of the many international academics or academics with long-distance relationships who are lacking the time to visit their families. Management and heads of departments should take a lead in this and set an example. On a smaller scale, we hope that the new on-campus community garden that the Young Academy is currently having designed will prove to be a space where staff and students can recalibrate the disconnectivity-connectivity balance and can act as a starting point to help reconnect and restore well-being.

Connecting schools and disciplines and connecting to our environment are a good way to start, but it should not end there: recognizing the challenges of academic careers at neoliberal institutions means realizing the interwovenness of care and connectivity. Universities can and should go further than what is proposed by VSNU and should provide a work environment where the well-being of employees is not an afterthought, point of negotiation, or extra item on their to-do list, but sits at the top of the university's priority list.

¹ <https://www.vrt.be/vrtnws/nl/2022/01/04/bazen-mogen-federale-ambtenaren-niet-meer-opbel-len-na-normale-we/>

² <https://www.theatlantic.com/business/archive/2018/01/amazon-mechanical-turk/551192/>

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Towards Gender Equity at the University: Commitment, Cash, Creativity, and a Critical Lens

Marjolein de Boer

Three years ago, I was sitting at a bar, discussing the pros and cons of pursuing a career in academia with three of my colleagues. We are all women and we are all doctors: two postdocs and two assistant professors. One of us is resolute: she does not want to stay in academia. Although she is very passionate about her research and courses, she does not want to have the insecurity that comes with working on temporary contracts. Nor does she want to sacrifice her weekends and holidays to do her research because her education tasks and bursary applications take up so much of her time. But most of all, she longs for a working environment where she would have ample female role models, where she would not be asked – as the only (young) woman in the room – to take notes, where she would not have to work twice as hard as her male peers to get the same promotion, where she would be able to have a family, work part-time and have a career. Me and the other two women nodded: although we love our research and education practice, we all recognize the heavy demands a career in academia places us.

When I talk about these kinds of issues with being a woman in academia, my objections are often reduced to a mismatch between individual priorities and what it requires to be a (successful) academic. It is nothing that leaders in a university or society should be worried about: dissatisfaction with (or even leaving) academia is a matter of individual preferences. This idea not only silences the existence of bias and discrimination against women at the university but also implicitly places the responsibility for the existence of this culture largely with women. They should have gotten their priorities straight, right? So when female academics critique the female unfriendly culture at the university, they are nudged into believing that it is not the university, not society, but that it is they that are the problem.

Combatting a Biased and Exclusive University

Despite this tendency to question and undermine women's experiences of discrimination, there has been an increasing number of initiatives to protest the exclusive culture at universities. Under the name *Athena's Angels*, four female

professors have combined forces to address bias against women in academia and defend their interests. On their website, they publish long lists of evidence of discriminatory practices at the university – from research reports, to shocking personal stories, to excerpts of university websites where male pronouns are consistently used to refer to academics and university leaders.¹ Another good example of a protest against the biased university culture is the popular *Tumblr* website “All male panels”.² Here, people send in programs of conferences featuring panels with only male participants. These so-called “manels” are then named and shamed on the internet and social media. And then there is, of course, the monitor of the Dutch network of female professors (“Landelijk netwerk vrouwelijke hoogleraren”/LNVH). Every year, this network publishes a report about how many female professors work at Dutch universities. Its statistics and figures are not pretty. Although numbers are rising, only 25,7% of the professors in The Netherlands was female in 2021.³

I think about all these different naming-and-shaming protests because I wonder what is needed to combat the current biased and exclusive university culture at Tilburg University. And yes, our university *is* biased and exclusive. The most eye-catching piece of evidence is that, according to the LNVH, Tilburg University is currently the lowest scoring non-technical university when it comes to the number of female professors. In 2020, only 23,9% of the professors were female. With that, the university not only scores below the national average (i.e. 25,7%) but also fails to reach its own target figure for 2020 (i.e. 25%).

In 2027, Tilburg University wants to be “Curious”, “Caring”, “Connected”, and “Courageous”. In becoming this new and improved university, gender and diversity aspects need to be accounted for. The university seems to acknowledge as much in sketching out its challenges in the strategic plan “Weaving minds and characters”. “Diversity, inclusion, and a safe working and study environment (social safety) are essential” the report reads, “but [such an inclusive environment is] not self-evident yet”. But the future may be bright(er). “We want to be caring” (p. 37), the university states. And then these sentences grab my attention: “We [...] pay attention to diversity, inclusion”. “We strive for diversity in teams and exploit the diversity and complementarity”.

¹ <https://www.athenasangels.nl>

² allmalepanels.tumblr.com

³ www.lnvh.nl/monitor

While these words are beautiful, they give rise to two pertinent questions: what does it mean to pay attention to diversity and inclusion? And how to actually attain diversity in teams? In formulating an answer to these questions, I argue that the strategic plan misses a couple of crucial c-words. In “paying attention to diversity”, the university needs to have and keep a Critical lens toward Categorization and Counting. And in “attaining diversity in teams”, the university has to Commit to more Cash for diversity recruitment programs and to develop and foster Creative solutions toward Culture Change.

Paying Attention to Diversity: Being Critical towards Categorization and Counting

“We need to pay attention to diversity”, the university writes. In doing so, inequalities and discrimination need to be named so that they can be tackled through appropriate measures. In addressing the exclusive university culture, it is important to state – again and again – that women are underrepresented in academia. At the same time, calling out inequalities can also create and sustain discrimination. Naming, defining, and categorizing are biased practices. They do not only help to understand those who are named and categorized, but also – and perhaps pre-eminently – construct perceptions of people who are being defined (Clair and Denis 2015). The act of naming and defining departs from the premise that there is someone (or something) that can take – and has the right to have – that defining role. It also encloses the invasive and sometimes violent demand to be made understandable, to be a subject for investigation. Leaving aside the actual content of the definition, the act of categorizing in and of itself already puts the one being named in a marginalized position over and against the superior one who does the naming. Such discriminatory dynamics are inherent in important questions like “who are women in academia?”, “how many female professors are there?”, and “why don’t they make it to the top?”. In asking these questions, we do not only attempt to understand the underrepresented – where they come from and what their struggles are. In doing so, the one being questioned is also made to be the deviant, the enigma, the non-normative. The one who asks the question, in turn, is (made) the norm. This person, after all, does not have to be investigated or explain themselves because their position in academia is perceived as self-evident.

Counting is often a vital part of naming and categorizing. Again this biased gaze: counting is and was being used to see how important or threatened (or threatening) a certain species – human or otherwise – is. Counting is often used to calculate an average or a mean. When there are a hundred ladybirds with eight dots on their

backs and twenty with six dots, the hundred ladybirds are 'normal'. This normality is not a descriptive fact, it is normative. Indeed, what is normal is also considered the norm, the status quo. Non-normality, then, is considered deviant and that deviancy is often understood to be a (potential) threat to that which is considered the normative normal. This makes counting far from an innocent act. Even more so because in revealing what is and is not normal through counting, we also run the risk of sustaining and (re-)enforcing harmful normativity. If there are hundred academics in a room and 76,1% are male and 23,9% are female, male academics are not only revealed to be the normative norm. They may also come to see themselves as such – whereas women may come to consider themselves as deviant. Counting and sharing numbers, in other words, is not a descriptive act. It reveals normative constructions and constructs how people come to see themselves as (non) normative.

It is important to name and measure inequalities, to count how many females work as academics in The Netherlands. Percentages such as that there are only 23,9% female professors at Tilburg University are pivotal in addressing that the university needs to work hard(er) to attain a more inclusive working environment. But we always have to adopt a critical perspective toward such practices. Here, relevant questions are: why and how are we measuring inequalities? What is the impact of these measurements on the inequalities that are investigated? And how can we communicate these measurements so that they do not reinforce those inequalities but rather help to dissolve them? While a univocal and definite answer to these questions is, of course, not possible, it is important to constantly ask these questions in order to maintain a critical lens.

Diversity in Teams: Committing with Cash for Diversity Recruitment Programs

“We strive for diversity in teams”, Tilburg University writes. In order to attain this vision and to become a more inclusive and female-friendly university, it is important to take measures of equity. In discussions about fighting bias and discrimination, the term “equity” is often used interchangeably with “equality”. Acknowledging their differences, however, is vital in forming a (more) female-friendly university. At the university, where women are systematically disadvantaged in relation to men, ideals that determine what it means to be a successful academic are formed against benchmarks designed for the advantaged group. For women, becoming a successful academic is, therefore, harder and often untenable and unrealistic. An equitable approach assumes that one can only change these marginalizing benchmarks by customizing solutions based on individual and sub-group needs,

rather than providing everyone with the exact same resources. An equitable framework is thus based on fairness and takes into account the unequal context from which we need to work towards an equal university (Gaudet et. al. 2022).

In the coming years, more women need to be recruited for professorships at Tilburg University. The university itself envisions having 28% full female professors by 2025. Measures to reach this may include more diverse selection committees and offering gender-sensitivity training for those committees. In my view, however, we have to think of more radical and quicker measures if we want to reach this wonderful but ambitious target: the university needs to allocate and distribute more cash in equitable ways. Here, we can think of a substantial investment in setting up (or reviving) diversity recruitment programs such as the Philip Eijlander Diversity Program. Such programs have extensive emancipatory power. They will, of course, immediately increase the number of women in full-, but also associate and assistant professorships. Such an increase in female professors will also improve the university's gender balance in the long run as it allows women to kick-start their careers and get promoted easier and earlier. And such recruitment programs will lead to more female role models, thereby showing younger women that a career in academia is achievable. In this sense, taking equitable measures by investing in diversity recruitment programs will work as a catalysator to eventually form a generation where gender equality is the norm.

Diversity in Teams: Foster Creative Solutions towards Culture Change

While working towards attaining equity – and eventually equality – at the university may begin with money, it never ends with it. Investing in a more equal gender balance is only a prerequisite: truly obtaining equality at the university necessitates a culture change. Discrimination on the basis of gender is often part of a deeply ingrained social mechanism. It is in our language: how we use male pronouns to describe academics. It is in the prejudices that we have and act on: that when thinking about scientists, people often think of men. It is in the fact that a man “gets the benefit of the doubt” more easily in a job interview, whereas a woman has to prove her qualifications more explicitly (Couch 2012; see also *Athena's Angels* website for more examples). Because such implicit (or “modern”) bias is often unconscious and unintentional, it is not only harder to prove than explicit discrimination – such as pay gaps, unequal gender distribution among employees, and plain sexist comments –, but it is also hard to fight. Such discriminatory practices are nevertheless very harmful to those who are confronted with this kind of language use, these prejudices, and such quality assessments. Drawing out and

changing these persistent biased structures, therefore, requires an elaborate action plan that focuses on creative solutions. While there are many steps one can take to combat implicit gender bias, I want to briefly focus on three approaches that effectively stimulate a gender-inclusive culture at the university.

First of all, there is a lack of female leadership at the university. This is not only because women are outnumbered, but also because women are less visible because of persistent gendered norms of modesty and leadership. That is, while self-promotion is often applauded for men in managerial positions, the ideal for women is to be modest. This social ideal perpetuates the lack of female involvement in top management positions (Budworth and Mann, 2010). One promising way to increase women's visible profiling is to train women in the power of storytelling. For thousands of years, people have been using stories to not only inform, but also persuade others, elicit emotional responses and build support for culture change. Teaching the art and theory of emancipatory storytelling to female academics is therefore an important tool for provoking change – for increasing the visibility of female scholars and eventually breaking down the ideal of being modest for women (Guaraldo 2013).

Second, young female academics need to be supported through an interdisciplinary and international mentorship program. In doing so, people from various disciplines and national contexts with various challenges and successes can learn from each other. It is significant that such a program should not only include female mentors but also men or people with other gender identities. This circumvents the risk of making only women responsible for attaining a more gender-inclusive university.

Finally, gender inclusivity at the university extends beyond the representation and support of faculty and staff. It also encompasses how universities teach and what programs they offer. Herein, diversifying the curriculum is key: more female authors need to be included in mandatory reading lists for students, and female thinkers and scholars need to be systematically acknowledged and discussed in the classroom. Thus, only by giving women a powerful voice as leaders, by explicitly supporting them in their careers, and by acknowledging their credibility as knowledge producers we can begin to think about a real culture change at the university.

Envisioning a Female-Friendly Tilburg University

Back to the women at the bar. We are a couple of years down the road and we still see each other regularly. One of the women does not work at the university anymore, one is thinking about another career path, and the third woman and I want to stay. In fact, I cannot think of another job I would love so much as I love this job. But my love affair with the university is also a bit perverse. I (and other female academics) have to constantly deal with the biased culture at the university. It is impossible to overstate the many ways in which we, as women, have to fight this bias on a daily basis. We have to work harder for promotions than our male peers; we suffer from the pay gap; we have to make a career without a lot of female role models; we may feel responsible for protecting younger female colleagues against this institutionalized bias; we have to fight harmful stereotypes that a scientist, an academic, a genius is not a woman but a (middle-aged, white) man; in salary negotiations, we are asked whether that raise is really necessary and whether our partner does not make enough money, and we have to prove – again and again – that institutionalized bias and implicit discrimination at the university still exists. And finally, if we address these issues, it is often perceived as “being difficult”, qualified as “exaggerated”, or met with the suggestion to “just keep our head down and work”.

I often wonder how I would experience my academic life if I would not have to deal with these issues. Would I have more energy left? Would I be more productive? And for my female colleague who has left the university: would she still be working there if it would be a more female-friendly place? These questions are, of course, rhetoric: the answer is yes. Thus: for all those passionate, clever and capable women that worked, still work, or want to work at the university it is of the utmost importance to achieve a more inclusive and diverse university. And it is my sincere belief that with commitment, cash, creativity, and a critical lens such a new and improved Tilburg University is possible.

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Curious

University: A Concept in the Making

Claudia Zucca

In 1088, several groups of self-organized students decided to unite and establish common rules to teach and learn together (Janin, 2014). That's how the "Universitas Studiorum" – corporation of students or guild of scholars – was born and the very name university (community) established. This phenomenon took place in Bologna, Italy. The University of Bologna was the first university in modern history, and it has been in continuous operation since its foundation.

We still call these educational institutions universities, but it would be hard to compare the ones we have now to their thousand-year-old ancestors. Even if the university of Bologna is still prospering, it is not even remotely resembling itself a thousand years ago. Still, with the purpose of teaching and learning, these institutions are living organisms that evolve together with society and the people who populate them. In light of this idea, what makes a university good? What should a good university look like? This essay makes use of a few theoretical tools to discuss how we can make a good university for the time we live now and invites everyone involved to make their opinion count.

Making a University Good

The Roman Catholic clergy had exclusive access to culture for centuries, and monasteries had both the roles of discriminating content to be taught from contents to be hidden from the majority of people and instructing the ruling classes, both the clergy and the secular ones. The popular imagination considers the middle age an obscure time where knowledge was lost, and social evolution went backward. Most likely, rather than a loss, it was a shift. For a majority of people, theology and philosophy were less urgent to learn in a social context where more immediate material needs had to be satisfied since the population was carrying out manual labor, and the common life had to be reorganized to respond to the moment's needs. Even if this practical knowledge was less noble, it still had to be transmitted through generations and established on a regular basis.

Artisans and merchants started organizing themselves into guilds to provide solutions for their everyday problems. By responding to the demand of guilds of workers to train their members, universities were established to provide a secular but solid education independent from the clergy to provide training on specific professions and support the development and economic establishment of the

bourgeoisie (De Ridder-Symoens and Rüegg, 2003). The provision of certified and standardized training contributed to forming a new socio-economical system that promoted science, technology, and arts, significantly impacting the world. The groups of self-organized scholars who started the first universities were simply the product of the needs of this time. For instance, law scholars began to pass on their knowledge and develop new ideas to better organize collective life; medical doctors started to systematically observe the human body to improve their community's quality of life.

Universities were born to address social needs. They were the direct product of their time as well. This idea does not only apply to early universities. We could review the history of universities worldwide for their entire life cycle and provide evidence that these organizations change alongside society to meet people's needs in specific historical moments.

Can we claim that the "great reforms" of Maria Theresa in the Austrian Empire did not affect how knowledge was shared within educational institutions? Would we think that the Sorbonne was not affected by the French Revolution? That the secret societies that developed after the fall of Napoleon and the riots that took place did not change what was taught to students at the time? Or, in contemporary history, would anyone be able to claim that the 1968 movements in Europe were independent of the economic boom that took place after the second world war, the redefinition of human rights after the holocaust, and the mass access to education and health services? Such a claim would be unreasonable.

Society is a complex system. A system that is sometimes more complex than the natural ones such as bees or ants. Each input and each change has consequences for the entire system, which is in constant evolution (Bertalanffy, 1968). Even if it is impossible, or at least beyond the scope of this essay, to account for the role played by universities within this complex social system we live in, I can highlight a few relatively well know theories that can help us understand how these organizations adapt to needs of the historical moment we live in and change it. I will consider four points: 1) Universities are organizations; 2) people experience universities; 3) people are not independent of each other; 4) Some people are more influential than others.

Universities are Organizations

Universities are organizations of people set up to spread and establish a body of knowledge selected by its members as the appropriate one to achieve some pre-defined goals. The set of goals defines a university in its inner nature. The prosperity of universities, as much as of any organization, revolves around the sense they make for themselves. Weick (1995) explains that “sensemaking” determines an organization’s success. Sensemaking implies the existence of a strong identity developed around the goals people set for their organizations. They work around a narrative that distinguishes them from comparable but different models and set up an ideology for themselves. This cultural narrative is a reinforcing process. The more people invest in it, the more it grows, and the more the organization becomes defined, distinguishable and successful. The founders of the university of Bologna aimed to teach subjects outside the domains covered by the clergy. In this way, they differentiated their organization from the already existing ones.

At the same time, it was probably not easy at the time to claim that civil law was as crucial as canon law. Still, they believed in the relevance of their goals and made sense of their newly created organization so that every person involved trusted the good of the new institution and worked toward its success. The same phenomenon happens every day in our universities. For instance, when a new staff member gets hired, they need to familiarize themselves with the new institution’s rules and values. Suppose they do not share the enthusiasm and do not commit to the organization by following the example of their colleagues. In that case, it is unlikely that they will have a successful career within the institution. Of course, there are cases where the new hire is an innovator and wants to introduce change, but they still need to support of other staff to shape a cohesive view of what their organization should be. The constant reflection on the university’s values in response to the historical time we live is at the heart of the concept of the university itself, which is “in the making”, alongside the complex world we live in.

People Experience Universities

Universities are constituted of people who “experience” their organizations every day. Philosophers extensively tackled the relationship between people and the world. Considering the perspective of phenomenology (e.g., Martin Heidegger, Jean-Paul Sartre, and Edmund Husserl), we can look at the sensemaking within organizations from the opposite point of view.

On the one hand, sensemaking theory focuses on the university as an entity provided with a set or goal or an ideology that makes it prosper, putting the organization's well-being at the center. On the other hand, from the perspective of phenomenology, we can consider a university as the aggregated product of the individual choices made by the people that work and study within. Rather than a cohesive and purposeful product of unified minds, the university can be seen as the accidental product of individuals that make conscious and intentional choices in response to the environment they experience in their everyday life.

Sartre (1946) claims that people are what they planned to be. Hence, a university is an aggregation of what each of its composing people intended to be. Sartre sees people as entities embedded in history able to produce change and reshape society in agreement with their actions. These actions could be purposeful if the actor is able to experience the world they are living in. Otherwise, these actions could be accidental since not taking any choice implies complying with the choice someone else's makes for you.

These two points of view, which focus respectively on the organization and on the people of which it is constituted, complement each other. We cannot assume that a university will work as a single coherent body with a single soul, as much as we cannot assume that each person within the university has an interest or capability of exerting their free will. Not every actor counts equally in a complex system. Social dynamics are more complex.

People are not Independent of Each Other

Sartre resonates around the idea of a free man able to experience life and make decisions in isolation. Still recognizing the great intuition of this philosopher, sociologists have extensively addressed the social components that influence how people experience the social world and make decisions imprinting society. For example, we can agree that people who spend time together look and behave alike. This phenomenon is called homophily (McPherson et al., 2001). However, the question is, how do two or more people get to have a similar behavior that potentially leads them to similar decisions and similar contributions to the organization of a university? Two competing phenomena occur, namely social influence and selection.

“Social influence occurs when an actor adapts his behavior, attitude, or belief, to the behaviors, attitudes, or beliefs of other actors in the social system” (Leenders,

2002, p.26). This influence can be intentional or unintentional. Still, it can affect the dynamics of a social group. An example within a university might concern two colleagues that need to take a position about a department policy. One staff member formulates a compelling opinion concerning a particular issue because they are better informed than the others. A second staff member decides to adopt the same view and form decisions concerning the university's future accordingly. Social influence can also be called social contagion.

The other engine that moves homophily and drives similar dynamics of decision-making that ultimately affect social groups and organizational behavior is selection. Facing bounded rationality (Simon, 1957) and the impossibility of benefiting from complete information about a specific issue, people use shortcuts to make decisions and emulate the behavior of others they perceive as similar to them. They select them as a template to follow given their resemblance to themselves (Steglich et al., 2010).

While in the social influence case, the emphasis is on an idea that goes viral, making homophily occur between two people; in the selection case, the causality process is reverted. People end up sharing common views, given that they emulate someone perceived as similar. These dynamics further specify the dynamics through which a university gets to define its identity and ideology.

Some People are More Influential than Others

Finally, one last point to explain what makes a university good for its time is the pivotal role some individuals play within a community. Even if everyone can exert social influence on their peers on a random base, indeed, some people can systematically exert this influence due to their specific social roles. In sociology, we can talk about the popularity effect, or we can use the expression "the rich get richer" (Merton, 1968) to define a phenomenon called 'preferential attachment' (Barabasi and Albert, 1999) where already popular people are more likely to get even more popular and spread their ideas.

Within the context of a university, people that benefit from higher popularity can usually be deemed with the attribute of intellectuals. Of course, we can benefit from a wide array of definitions of intellectuals. Still, we could agree that they are people who capture the spirit of their time to a more significant extent and can represent the social group they belong to within a broad debate that involves different parties, promoting their opinions (Gramsci, 2005).

Rather than simply focusing on the popularity within the organization, intellectuals acquire a pivotal role on a larger scale, usually as opinion leaders who regularly contribute to newspaper columns or who intervene in a country's social and political debate in various ways. As a result, these people usually benefit from a more significant credit among their peers and find themselves in a privileged position to spread their idea by exerting social influence and selection.

Our Good University

A perfect university does not exist. We can only hope that our institutions capture the needs of our time and that the people that constitute them generate, select and promote values through the social dynamics discussed in the previous section to make sense of the organized reality they live in and increase its prosperity. Tilburg University is a young institution, but it has already been through a long series of reshaping processes that substantially changed its sensemaking.

Funded in 1927 to address the need for training people with a prominent role in a community of merchants and entrepreneurs in the Catholic part of the Netherlands, it identified its core values as a Catholic Business School – Roomsche Katholieke Handelshoogeschool (Tilburg University, 2022). This first funding core synergically contributed to the modernization of North Brabant (and the other way around), so the need to expand and review its core values was felt very soon. Over the years, many more subjects were added to the original business orientation until the point that “Understanding Society” was the motto that summarized its intentions. The initial target audience of Catholics was broadened to include people from all backgrounds. The name Tilburg University was eventually a better description of what this university offers its members. A university in the city of Tilburg, which is open to welcoming an international community fond of knowledge that wants to positively impact the social world they live in.

In its strategy Tilburg University introduces four values that it embraces to promote positive change: 1) curious, 2) caring, 3) connected, 4) courageous.

The keyword *curious* invites everyone in the community to pursue their original research interest and give importance to their unique point of view to ultimately enrich the community as a whole. *Caring* is a value that pushes the Tilburg people to positively impact the society they live in with their work. This pillar is true to the original intent of the Tilburg funding core: A university that works to understand society and advance it. *Connected* is both an invitation to be inclusive and create a

multicultural environment and an acknowledgment of the most recent trends in research. Complexity science used to be a niche subject but is now widely accepted as the most comprehensive way to understand social systems. Reductionist positions in science are found to be not sufficient to explain social phenomena any longer. *Courageous* pushes each person in the community to live the present time, read it and act as an innovator instead of reproducing old patterns already set in place and found unsuitable.

Tilburg University's sensemaking is embedded in the present time and pushes the university and its community to be a better version of themselves. Considering that this is a top-down document, are the people on board? How much have the people in this university contributed to this sensemaking with their free will? How much does the vast majority accept this document through social influence or selection? How much does our intellectual class play a pivotal role in making this document accepted and supported by the community?

It is hard to answer those questions, but it is good to spend some time reflecting on these social dynamics. We have the best possible version of the university we can have now, and we should commit to making the most of it, whether we like it, by supporting it, or whether we do not by exerting constructive criticism that can benefit the entire community.

Conclusion

We are embedded in complex systems of relationships that determine what the future will bring to us. Being conscious of all the limitations we face, we should still contribute to our organization's prosperity. If shared within the community, values will drive this institution toward significant social impact. On a broader scale, many universities, a network of universities, would be able to address more considerable social challenges and impact the world even more significantly. This idea overlaps with the concept of historical materialism (Giddens, 1981), where history is a dialectical process that sums up each of the social processes of which it is composed. And with historical materialism overlaps an invitation to take action to be part of the moment we live, still being aware of the limitations we face as humans embedded in complex social systems.

As Tilburg Young Academy members, we are here to read our time and promote a culture of broader understanding, awareness, and positive impact beyond the walls of our departments at Tilburg University. We are here to understand, propose and

introduce constructive criticism if needed. After all, we are just a giant corporation of scholars self-organizing themselves, and like those in 1088, we just want to exchange knowledge in a global village to make the world a better place. We need to make our role count in the complex scenario we live in, be part of our university in the making, and make our role count in the dialectic history of the future.

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Building a Strategic Advantage with Open Science

Hannes Datta, Harm Schütt

Substantial financial resources are invested in scientific research, amounting to 2% of GDP in the EU and translating to 5,600 researchers per million inhabitants in the Netherlands (UNESCO Science Report, 2021). Yet, some consider a sizable part of this investment misspent. The output of research projects is typically published in academic journals. Still, necessary information to judge the quality of the output often remains inaccessible (e.g., code, data, or details on null results), raising several concerns. First, non-transparency regarding essential parts of the research process complicates building on existing research, leading to inefficiencies in scientific progress. Second, the unavailability of said resources makes research more difficult to verify, with potentially adverse outcomes for society (e.g., Open Science Collaboration, 2015; Camerer et al., 2021).

One natural solution to these issues is for researchers to become more open – to conduct *open science*. Open Science aims to “increase transparency, accountability, equity and collaboration, and knowledge production by increasing access to research results, articles, methods, and tools” (Ross-Hellauer, 2022, p. 363). Its proponents include UNESCO, which in November 2021 published the first international framework on open science – adopted by 193 countries attending UNESCO’s General Conference (UNESCO Recommendation on Open Science, 2021).

Tilburg University has already made significant steps toward increasing transparency and accountability – by encouraging researchers to publish articles with open access¹ and share data and protocols in institutional repositories upon article acceptance.² A small but growing community at Tilburg University also practices open science *before* publication (e.g., Sokolova et al., 2020; Wichmann et

¹ Publishing open access often entails increased article processing fees to compensate publishers for forgone revenue. For example, at Tilburg University, TiSEM had established an open access fund, paying such fees for articles published in top core journals. Since about 2020, an agreement between VSNU and major publishers waives these fees for researchers affiliated with Dutch research institutions.

² For example, TiSEM’s Replication Package Policy requests researchers to post data, code and any accompanying material in Tilburg University’s Dataverse upon article acceptance. Recently, such replication packages can be added to Tilburg University’s research portal Pure, increasing their visibility.

al., 2022; Zeelenberg et al., 2021), creates tools to verify the accuracy of statistical reporting (e.g., [metaresearch.nl](https://www.metaresearch.nl)), develops tutorials for researchers and students (e.g., tilburgsciencehub.com), or provides a platform for knowledge exchange (e.g., Open Science Community Tilburg). However, systemic change in how research is conducted across the whole research cycle is still in its infancy.³ For example, while replicability of studies is encouraged broadly, many replication packages do not replicate.⁴

If open science is such a natural solution to the integrity and efficiency issues faced by the scientific community, why is it not universally adopted? And how can we facilitate its broader adoption at Tilburg University? To answer these questions, we first discuss common concerns raised against the adoption of open science in section 2. In section 3, we highlight some of the key benefits of practicing open science and conclude, based on scientific research, that it is a desirable goal for Tilburg University and society at large. Finally, in section 4, we make recommendations for Tilburg University on how adopting open science across the research cycle can be accelerated.

Why are Researchers Hesitant to Engage in Open Science?

Given Tilburg University's strategic goal of pursuing high-quality research, it seems surprising that some researchers remain hesitant to embrace open science. For example, the data editor at the American Economic Association recalls: "In a simple check we conducted in 2016, we emailed all 117 authors that had published in a lower ranked economics journal between 2011 and 2013 (Vilhuber, 2020). The journal has no data deposit policy and only requires that authors promise to collaborate. We sent a single request for data and code. Only 48 (41%) responded, in line with other studies of the kind (Stodden et al., 2018)" (Vilhuber, 2020). In this section, we discuss some of the critical concerns raised against the adoption of open science.

³ For an overview about potential open science contributions across the research cycle, see <https://www.fosteropenscience.eu/content/what-open-science-introduction>.

⁴ Replication packages typically consist of data, software code, and any other material required for verifying research results. For replication packages to work reliably, they need to be rigorously tested. In 2017, TiSEM researchers Jaap Abbring and Tobias Klein implemented a testing and debugging process for replication packages submitted to the *Econometrics Journal*. They found that many submitted replication packages were incomplete, and that revised replication packages resulted in updated results in papers.

Early-career researchers face adverse incentives and fear loss of competitive edge

Early career researchers are in the process of building a research program, and career progression in many disciplines hinges on publishing in top-tier journals. Open science practices do not necessarily conform with the incentives faced by early-career researchers. For example, given the time required to develop publication-ready code, open science can often be seen as an unnecessary burden, a “nice-to-have but not necessary” add-on to the already challenging task of publishing. In many institutions, writing reproducible code and sharing data are not explicitly valued. Having enough top-tier publications is often *the* necessary and sufficient criterion for tenure, making open science a luxury researchers can decide to invest in – or not.

In a similar vein, sharing data openly is viewed by some as risky. Constructing a high-quality data set or coding new routines takes time and effort, representing a high barrier to competition from other researchers. Suppose other researchers seek to contribute to the same research stream. In that case, they either need to incur similar up-front investments (e.g., in data collection) or collaborate with those who already have collected the data. Having such a barrier to competition is viewed as necessary by some researchers. The fear of many early-career researchers is that public sharing of data and code is equivalent to a firm freely giving away its patents to its competitors – doing all the challenging work and giving others the chance to scoop your next idea before you can get to it. A recent *Science* article voiced similar concerns openly regarding global research collaborations (Serwadda et al., 2018).

We believe that these two issues – open science practices being viewed as nice-to-have but not crucial and potentially even career harming – are the main reasons why many early-career researchers remain hesitant to adopt open science principles. Established researchers, in turn, face additional concerns that we discuss next.

Established researchers face high learning costs and may put their reputation at risk

The risk of losing a competitive advantage extends to established researchers. Sharing proprietary data and/or code only with potential collaborators is a widespread practice. It is sometimes also a path to new publications. If a colleague has a promising new idea requiring said proprietary data, there is a high chance of collaboration.⁵ Like early career researchers, established researchers may fear

⁵ Tilburg-affiliated institute AiMark does provide access to proprietary data to individual researchers. These initiatives are important to ensure data access to a variety of scholars, even if such data cannot be made publicly available (e.g., because of its critical business value).

that such collaborations are less likely to happen if data or code become publicly available.

More senior researchers also face considerable learning costs when seeking to adopt open science practices (e.g., documenting data sets and implementing file versioning takes time and effort). Simultaneously, many researchers are exceedingly pressed for time in challenging roles at universities and journals. Understandably, if the learning costs do not outweigh the perceived benefits, it is hard to justify the personal investment.

Finally, established researchers risk reputational damage. In many disciplines, mistakes of any form seem significantly reputation damaging. For example, a widely publicized Excel input mistake invalidated the findings reported in Reinhart and Rogoff (2010) and continues to be a source of ridicule for the authors. In such an environment – analyses requiring increasingly complex code and mistakes in the code being a source of potentially serious reputational damage – it is understandable that researchers might be reluctant to potentially have strangers “snoop around” in their data and code (Gelman, 2017; Allen and Mehler, 2019).

Which Benefits does Open Science Entail?

While we believe the concerns listed in the previous section are legitimate, we now highlight the benefits associated with practicing science more openly.

Enhanced quality and credibility

We believe open science leads to a more transparent and robust scientific process, ensuring that society has access to high-quality research results. One core issue at the heart of empirical research is the inherent subjectivity in the research design for complex analyses. For example, Silberzahn et al. (2018) provided 29 analyst teams with the same experimental data set and research question. Effect sizes varied widely, and most of the explained variation could be attributed to the complexity of the analysis task, leading to subjectivity in research design choices. A similar study was conducted among 70 analyst teams in neuroscience, yielding the same general conclusions (Botvinik-Nezer et al., 2020).

Subjectivity in research design choices poses a real risk to scientific discovery, potentially leading to a high number of published and undetected false positive results (LeBel et al., 2017; Steegen et al., 2016). The pressure to show statistically significant results coupled with design subjectivity is often considered a prime

reason for the low rate of replicability of studies (e.g., Simmons et al., 2011; Pashler et al., 2012).⁶ Low replicability of a wide range of papers, in turn, casts doubt on the validity of claims of that literature, endangers society's trust in scientific research, and potentially slows down the rate of scientific progress (National Academies of Sciences, Engineering, and Medicine, 2019). It is thus vital to be aware of the choices made in a study, which means being able to fully reproduce each step of the analysis.⁷

By sharing code and/or data, open science strongly promotes reproducibility and replicability. Current open science practices ensure a copy of work is available in high-quality repositories. The goal is to achieve the transparency required for evaluating the reproducibility and subjectivity of a study's main takeaways. In addition, by providing public repositories, researchers not only make code available but may also be able to incorporate community requests to disclose additional details, such as diagnostic parameters that have not been reported in the paper earlier.

Enhanced discoverability and impact

Publishing material across the whole research cycle may lead to a *broader* scientific impact among research communities other than one's field. For example, a software algorithm developed for an empirical study on power imbalances between music platforms and their suppliers can be used in other research fields to classify music genres more accurately (Pachali and Datta, 2022). Research on the differential impact of open (vs. not openly developed) science shows that open science contributions get cited and downloaded more often (e.g., Lawrence, 2001; Wang et al., 2015). The enhanced visibility is helpful for individual scholars and research institutions at large. To the extent that material becomes more discoverable, open

⁶ The problems are exaggerated by noisy data (Gelman and Carlin, 2014). Some researchers argue the replication crisis is exaggerated and/or due to incompetence of the authors of replication studies. One of the most striking counterarguments to the latter claim is that online bettors could predict which studies in the replication exercise by Camerer et al. (2022) were not replicable. Bettors cued on study traits like newsworthiness and data noisiness, suggesting that lack of replicability is not due to incompetence of the replicating team of authors.

⁷ The US congress tasked the US national academies of science, engineering, and medicine to draft a report defining the terms reproducibility and replicability and assess their impact on public's trust in science (National Academies of Sciences, Engineering, and Medicine, 2019). The report (1) defined both terms succinctly as: "reproducibility involves the original data and code; replicability involves new data collection and similar methods used by previous studies". The report argues that replicability and reproducibility are crucial pathways to attaining confidence in scientific knowledge, with the caveat that "[a] goal of science is to understand the overall effect from a set of scientific studies, not to strictly determine whether any one study has replicated any other" (17).

science also naturally supports collaboration, multidisciplinary, interdisciplinary, and sustainability and enables more complex research with diverse teams.

Open science output also becomes more easily discoverable, owing to its public accessibility on platforms used by scholars and the larger public (e.g., journalists and policymakers). The enhanced visibility of a researcher, in turn, may lead to a significant expansion in a researcher's network and potentially new (academic) collaborations. For example, a well-known case study in chemical research (Woelfle et al., 2011) shows how setting up an open project helped accelerate the scientific discovery process because relevant experts could identify themselves, rather than the lead researchers needing to rely on their network to identify the right people to ask for input.

Inclusivity and diversity

Open science promises to foster inclusivity and diversity. It is subject to debate whether it really does in all aspects, especially whether open science promotes equity between financially well- and less-well-situated research institutions (e.g., Ross-Hellauer et al., 2022). However, the open project case study of Woelfle et al. (2011) attracted a much broader and more diverse team of experts working on it than would have been possible in a more closed project. Recent network analyses also suggest that the open science literature has a more collaborative structure and uses more communal and pro-social language than does the comparable but largely independently developing reproducibility literature (Murphy et al., 2020).

Valuing open science output may also lead to the tighter inclusion of scholars with diverse talents. For example, research on complex choice models could rarely be carried out without expert knowledge of optimizing the underlying computer code. At the same time, open science makes available the process of research not only in the form of papers but also in the form of computer code, supporting multiple ways for researchers to learn about a particular problem.

Recommendations to Build a Strategic Advantage with Open Science

Open science is a contemporary and innovative way of conducting research and has the potential to accelerate research progress and increase efficiency through enhanced verification and collaboration. The goals of open science – to “increase transparency, accountability, equity and collaboration, and knowledge production by increasing access to research results, articles, methods, and tools” (Ross-Hellauer, 2022) – closely align with Tilburg University's shared values; to be

curious, caring, connected, and courageous researchers. Open science, by promoting transparent research, helps us search for and better evaluate new knowledge and insights, fostering *curiosity*. Open science promotes a diverse culture, true to the strategic goal of being *caring* scholars that respect each other and draw strength from differences. Freely sharing code, data, or other materials helps us to *connect*—to learn from other disciplines and embrace variety. Finally, open science fosters *courage*; it requires courage to put your code out in the open, to share your data freely, to expose yourself to very public criticism. In sum, we believe embracing open science is beneficial for our university and strengthens our shared values.

Among the research community in Tilburg, however, a feeling persists that open science practices are nice-to-have, but either not crucial or even risky for career progression. Thus, while open science is generally believed to be beneficial for society, whether it benefits *individual* researchers enough is not always clear, creating inertia in the adoption of open science. Below, we list recommendations that may alleviate personal concerns and pave the way for better science, i.e., open science, at Tilburg University and beyond.

First, reiterating calls by others (e.g., Gelman 2017; Allen and Mehler, 2019), we recommend fostering a culture where making mistakes is acceptable, thereby addressing one of the key concerns against the adoption of open science. To set the right incentives, sloppy work must have negative consequences. However, stigmatization is undesirable and unwarranted. In this respect, academia can take a cue from professional software development. Commercial software is rarely bug-free, despite many testing routines and extensive training for writing robust code. Why expect research to be bug-free when those systems are not in place, and many researchers are not professionally trained coders? We believe a change of culture would be a major step toward reducing this obstacle. One way to foster a mindset change could be to promote opt-in initiatives such as a “bug bounty hunt,” rewarding both the discovery (for the hunters) and the severity (for the participating researchers) of software bugs in replication packages prior to a paper’s first journal submission. Such an initiative may not only foster a climate where making mistakes is acceptable (and even rewarded) but may also directly lead to replication packages that do replicate.

Second, since many view open science as just nice-to-have and to increase the inclusivity of diverse types of research talent, we recommend conducting (experimental) research on how open science contributions at Tilburg University’s

schools can be measured and valued. An evaluation does not need to be quantitative. A more subjective approach to evaluating open science contributions may involve peer feedback of (non-peer-reviewed) software or datasets and their documentation. Understanding how to best value these and similar contributions seems key to increasing the incentives for wider adoption of open science practices and could even make an impact on the broader scientific community. In addition, further integrating open science contributions in existing systems (e.g., linking a researcher's GitHub profile to Pure) would already increase the internal visibility (and likely appreciation) of these and similar contributions.

Third, we recommend introducing open science practices to all our educational programs, both in the initial stages (in which students still discover a way of working), and in the later stages (in which students work on their Bachelor's and Master's theses). Such a step would establish open science as an alternative mode of conducting research in just a few years and thereby drastically reduce the upfront investments that early-career researchers will have to incur. In our teaching, we have learned that students enjoy collaborating on public coding projects or publishing datasets as a team. Embracing Tilburg Science Hub or similar platforms would be a relatively low-cost way for faculty and students alike to gradually learn to conduct open science. To promote working publicly on research projects, Tilburg University could invest in a campus license for state-of-the-art development tools for students and staff (e.g., GitHub, Bitbucket, or similar coding platforms), making software code developed at Tilburg University accessible to a broader community.

Fourth, open science practices are still developing at a rapid pace. To help spread evolving best practices, we advocate for researcher-led open science support. Such support services could assist researchers in developing and improving scientific software and code, test replication packages, or help turn prototype code into stable software packages. The initiative could be embedded in Tilburg's new Data Competence Center but could also exist at the level of schools (e.g., TiSEM-funded Tilburg Science Hub), or departments. Templates of such initiatives exist, as some leading research institutions have already set up labs where procedures for documenting data and reviewing code are standardized, leading to large efficiency gains for lab members (e.g., <http://whitaker-lab.netlify.app> at The Alan Turing Institute, <https://github.com/gslab-econ> by Stanford and Harvard scientists).

Fifth, we encourage researchers to discuss the introduction of open science practices in journals more openly, going beyond the "gold route" to publishing

open access. If more (top) journals embraced open science, such as by hosting and verifying replication packages, output quality and impact factors may rise, and incentives for researchers may increase to start doing open science. This shift is already happening in leading journals, such as the *American Economic Journal* (AER). In the review process, early-career researchers interested in open science can request authors to provide details on a paper more openly, such as through code or data. In a similar vein, researchers can start a conversation about the adoption of open science principles within departments. We observe young(er) researchers like working openly. Some research groups at Tilburg University have explicitly adopted open science principles. Research groups interested in becoming more open can follow the advice in Lowndes et al. (2017, 2019). We note that the transition to open science may equip departments with a unique competitive edge in their field, and therefore advise departments to start the conversation with team members.

Conclusion

In this essay, we have reflected on how open science can contribute to better science, and we have made recommendations for further transitioning to a more open research culture at Tilburg University. While we believe the arguments for a broad adoption are convincing, one should always remain “open” to different approaches of doing research, including a more proprietary take on software, code, and data.

One limitation of this essay is that both authors are quantitative scholars engaging in data-intensive research. For more qualitative disciplines, open science is unlikely to be conducted through writing software code. We hence encourage scholars to contribute to a conversation about the adoption of open science in their schools. Similarly, Tilburg University is home to more open science initiatives than we could mention in this essay. We, therefore, encourage scholars curious about the practice of open science at Tilburg University to consult the resources provided by the Open Science Community.⁸

Despite these limitations, we hope our essay contributes to an open discussion about open science at Tilburg University. While open science may not be the only way to ensure the execution of research with utmost integrity, we are confident

⁸ See <https://www.tilburguniversity.edu/research/open-science-community>.

about its vital role in ensuring the credibility of science and leading to new ways of working together, which – by the way – can be a lot of fun.

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