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JUNGE  
AKADEMIE  
 MAGAZIN  
ENGLISH EDITION

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DOSSIER  
A Guide to Failure

PHOTO COMPETITION  
Enchanted – Spellbound – Bewitched? The Fascination of Science in Pictures

JA INSIGHTS  
New Members, Ethics in Practice, Pupils as Risk Researchers

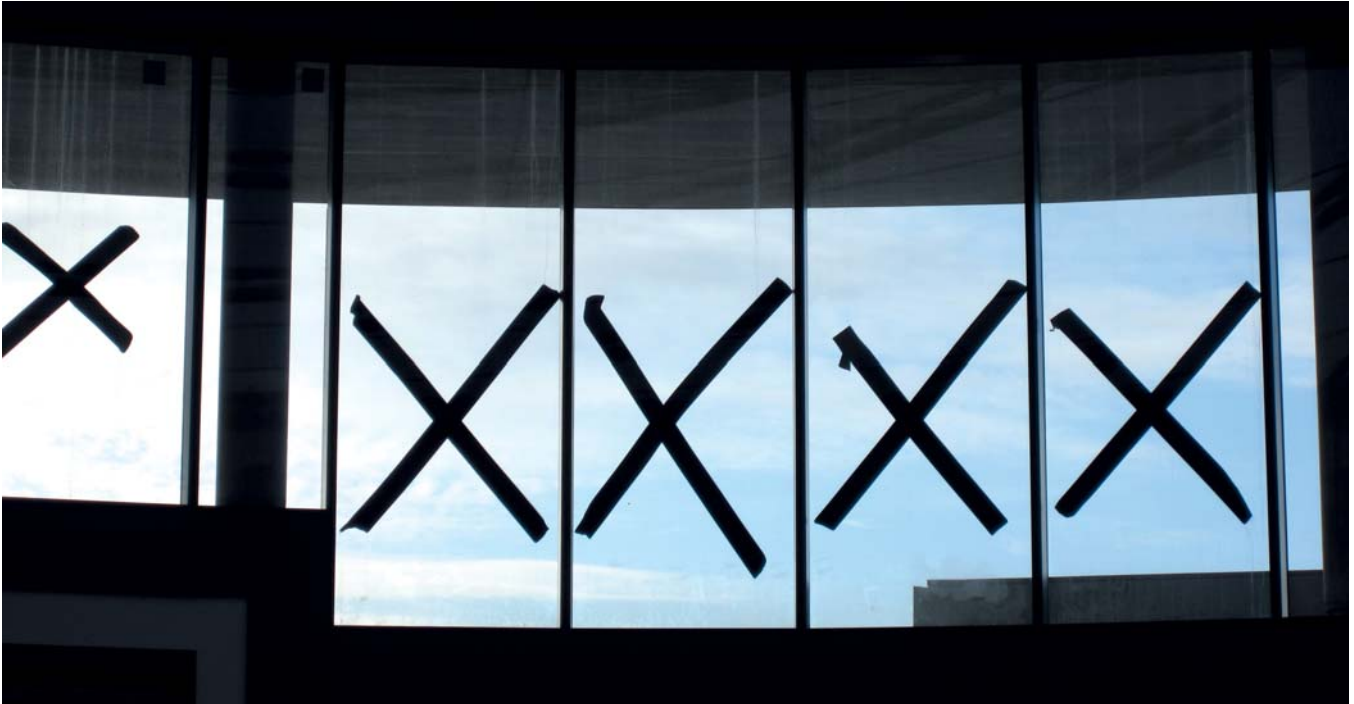
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## THE JUNGE AKADEMIE

The *Junge Akademie* (JA) was founded in 2000 as a joint project of the Berlin-Brandenburg Academy of Sciences and Humanities (*Berlin-Brandenburgische Akademie der Wissenschaften* – BBAW) and the German National Academy of Sciences Leopoldina (*Deutsche Akademie der Naturforscher Leopoldina*). It is the world's first academy of young academics. The *Junge Akademie* is co-owned by both academies, the BBAW and the Leopoldina. Since 2011 it has been firmly anchored administratively in the Leopoldina's budget and funded by the Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung*) and the *Länder* Berlin, Brandenburg and Sachsen-Anhalt. Its fifty members, young academics from German-speaking countries, engage in interdisciplinary discourse and are active at the intersection of academia and society.

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*What may initially look like a dead end might eventually open up new horizons: is failure an inherent part of progress?*

## EDITORIAL

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## What is failure?

**Short versions of the definitions and experiences from JA members' various research fields are contained in the medallions; the original quotations can be found on pp. 22-23**

# EDITOR'S LETTER

If you fail, you have been unsuccessful, not fulfilled the expectations you or others had of you, have not reached your goal or have had to forego your wishes or dreams. Usually, failure has a negative connotation. But why is that? The answers given by members of the *Junge Akademie (JA)* in the dossier on "Failure" are amazingly positive. 'Failure shows us the way to many other better questions,' says Emanuel Towfigh, and according to Robert Wolf: 'failure is part of our daily life.'

The idea for a dossier on "Failure" evolved during an ideas workshop in Weimar in winter 2012. Is self-determined failure a better kind of failure? Do you have to be clever to fail? Have you failed in academia if you do not get a professorship? In the dossier, we could only address some of the many questions. Members of the RG Sustainability investigated the successes and failures of sustainability in the context of finance, ecology and academia. The pieces by the economist Moritz Schularick, and the sociologist Magdalena Nowicka focus on how differently systems and individuals deal with (apparent) failure. Failure is related to social norms, which is why failure is often reframed in narratives. As the risk researcher Wolfgang Gaissmaier points out, biographies contain 'the things that worked' – and that, in comparison with the things that did not work, is not so very much.

In the second part of this issue you will find, as usual, reports on the various research and project groups at the *Junge Akademie*. The very first photo competition to be run by the *Junge Akademie* in collaboration with partners from the Netherlands, Russia, Scotland and Sweden was a huge success. More than 500 photos were submitted on the theme of 'Visions and Images of Fascination.' Turn to p. 28 to view the top ten images.

The editorial team and I hope you'll enjoy reading our magazine!  
Evelyn Runge

# Failure ...

**... means: a. the act or an instance of failing, b. a person or thing that is unsuccessful or disappointing, c. non-performance of something required or expected**  
**Collins English Dictionary**



# IS THE CONCEPT OF SUSTAINABILITY A FAILURE?

COORDINATION ALMUTH KLEMENZ | PHOTOS ALMUTH KLEMENZ AND ALEXANDER KNOHL

‘The Rio conference has failed,’ we were told by the media just over a year ago after Rio+20, the United Nations Conference on Sustainable Development, which, two decades after the Earth Summit of 1992, was once again held in Rio de Janeiro. In this country, however, sustainability seems to be developing steadily into a trend which everyone makes use of at will – and everyone interprets differently. The Research Group on Sustainability at the *Junge Akademie* has been examining the successes and failures of sustainability in various realms. Here are the thoughts of four of its members.

STEFANIE HISS

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*Professor of Sociology specialising in Markets, Organisations and Governance  
at Friedrich Schiller University Jena*

## **Failure is relative, or: the huge treasure trove of sustainability**

Has the concept of sustainability failed? Opinions differ. Of course sustainability has failed, says one side. Despite sustainability we are using ever more resources, exploiting ever more people, and will not meet the two-degree target when it comes to global warming. Sustainability is just a smokescreen to hide the medium- to long-term devastation of our natural resources. Just a moment, says the other side, it's not as bad as that. After all, we have become much more conscious about energy saving. Companies have pledged to protect the climate and respect human rights and are actually putting this into practice. Investors are taking a lot more care to put their money into businesses that are ethically, socially and ecologically acceptable. A huge cultural change like this takes time, but we're on the right track. You really can't call this failure!

Perhaps the question about the failure of sustainability is the wrong one to ask. Failure is closely linked to the objective that has been set. I have failed if I have not won the cup I was after or did not pass my exams. Then I have failed to reach my goals. But this is precisely where the problems start when we talk about sustainability. What is the goal of sustainability? To make the world a better place. To preserve resources.

To ensure that future generations have a good life. Sounds great, but that has nothing to do with a clearly formulated, distinct goal – which does not mean that precisely phrased, verifiable goals do not exist. Rather, there are masses of them, and everyone can pick whichever one they like from the huge treasure trove of sustainability. So sustainability can mean everything from not letting the water run while you are cleaning your teeth to renouncing the use of fossil fuels altogether.

And now we are getting to the heart of the matter. The question is not so much whether sustainability has failed as which notion of sustainability has prevailed in society. Thanks to political correctness, which categorises sustainability as ‘good’, we often ignore the fact that sustainability is not in the interests of all social stakeholders. Sustainability is often expensive and sometimes only pays off in the long run. Stakeholders subscribing to the logic of short-term return maximisation will not be easily convinced by this. And of course, resistance to fundamental building blocks of sustainability, such as measures to contain climate change, have come, and continue to come, from major US corporations and their political representatives. For them, non-sustainability pays – for the time being, at least. And even if the whole thing proves to have negative consequences in the long run: we’re not going to die tomorrow; before it gets to that, we’ll have discovered ways and means to keep asserting and enforcing our interests.

So sustainability has not failed. Instead, powerful social groups are working to ensure that it does not establish itself as the new, comprehensive, substantial, social guide to action. Which does not mean that sustainability has not conquered the verbal airspace. On the symbolic level, sustainability is on everyone’s lips; these days, even the biggest polluters and exploiters call themselves sustainable. But under this linguistic-symbolic blanket, at the real entrepreneurial level of action, things often look rather bleak.

A good example of this is the financial industry which nowadays also bathes in the glory of sustainability and showcases it to great effect in its sustainability reports – despite the fact that it really did fail in the financial crisis and nearly dragged us all down into the abyss. This, one can certainly describe as failure. But so what? Did that failure lead to a sustainable reform of the financial system, to a re-alignment with sustainable goals or to those responsible being called to account? As if! Epic fail – but the party goes on. Which is paid for by others after all, the same ones, incidentally, who will pay if the notion of sustainability fails and the average temperature of the Earth goes up by more than two or three degrees. You don’t necessarily learn a lesson from failure (not of the financial system, anyway) – just as learning a lesson (about genuinely sustainable development) will not protect you from failure. Because failure is relative, too: you have to be able to afford it!





ALEXANDER KNOHL

*Professor of Bioclimatology  
Göttingen University***Sustainable forestry – a strategy for success?**

The concept of sustainability actually derives from forestry. Exactly 300 years ago, in 1713, the Saxony mining administrator, Hans Carl von Carlowitz, introduced the concept of sustainable forestry in his book *Sylvicultura oeconomica*. Under the impact of the severe deforestation caused by mining and charcoal burning in Central Europe he demanded that the number of trees felled should not exceed the number that could be regrown. This would ensure a sustainable, that is, enduring use of the forest.

In the last 300 years, the sustainable forestry strategy has been a huge success in Germany. We now have large stocks of wood and a growing area of forest; acid rain damage is on the decline.



But is it going to stay that way forever? Today, the forest faces completely different challenges compared to 100 years ago. On the one hand, social aspirations have grown. Apart from producing timber the forests are used for recreation and tourism, to conserve biodiversity and water, to improve air quality and store carbon for climate protection. On the other hand, the climate is changing: in 100 years' time, it will probably be considerably warmer than it is now and the precipitation distribution will change. Whether the existing strategy for sustainable forestry will fail or continue to be so successful when confronted with these changes depends on the decisions that are made today with regard to our forests and on the sort of training future decision-makers will receive.

**Failure ...**  
**... as such is not a bad thing. It is just the unintentional outcome of having given something a try.**  
**Daniel Chappell**

# Failure ...

**... is positive for those who know how to handle it.**

**Alexander Danzer**

MARTIN WILMKING

*Professor of Landscape Ecology  
University of Greifswald*

## **The sustainability debate at universities – a tender shoot**

The beginning of 2005 saw the launch of the United Nations Decade of Education for Sustainable Development with the aim of integrating 'the principles, values and practices of sustainable development into all aspects of education and learning' – which includes universities. Today, a good year before the official end of the decade one might ask oneself to what extent this goal has already been achieved.

Of the 1,738 decade projects selected in Germany so far, a good ten per cent come from universities, so there are a number of examples of good practice. The catch is that they are mostly temporary projects dependent on the activities of individuals. When the project comes to an end, the relevant sustainability initiative usually dies with it.

This problem was also recognised by the German National Committee for the UN Decade, prompting the chairman, Gerhard de Haan, to state: 'We have to move on from project to structure.' This demand makes sense because the notion of sustainability in research, teaching and higher education only becomes 'sustainable' itself if it is anchored institutionally. In this respect, every university could become a wonderful (text-book) example of on-site sustainability, for instance by analysing the university's material and energy flows in terms of sustainability and integrating these observations into research and teaching at the same time.

So the notion of sustainability at universities has not failed but is just beginning to take root. It would be better still if even more universities took the initiative and used this debate as an opportunity, an opportunity to position themselves as a model of social change – as they have done so often in the course of their history.





JADWIGA ZIOLKOWSKA

*Agricultural Policy  
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### **Environmental technology – an example of growing success**

Humankind has always striven for economic efficiency whilst frequently neglecting the two other aspects of sustainability – the environment and social justice. It was only after the publication of the Brundtland Report in 1987 that many countries adopted all three sustainability levels as their slogan for political actions and as a future path for investment and innovation.

Several sustainability initiatives were introduced and implemented in the field of environmental technology: the use of renewable energy sources such as solar and wind power, biofuels, and biogas from biomass were advanced. In the agricultural sector, efficient crop systems and ecological and sustainable agriculture became important components of political measures. Many of these initiatives were very successful and were continued, mostly with increasing financial support from governments and private enterprises. One example is the production of biofuel from algae in the USA which has economic and ecological advantages compared to conventional fuels and even to other biofuels. Although the project turned out to be very protracted, it was crowned with success: today, the US Navy uses fuel made of algae.

Naturally, some initiatives were not successful. But it was not the concept of sustainability itself that failed. Rather, the problems were linked to external factors that are indispensable for implementing and enforcing sustainable processes but which were not applied in an effective, coordinated manner. Furthermore, in many cases, the concept of sustainability is not implemented in its entirety: whilst most programmes and policies targeting sustainability focus on economic efficiency and environmental protection, social aspects tend to be neglected.

There is considerable evidence to suggest that both at governmental and at corporate level the concept of sustainability will shape decisions to an ever greater extent. New environmental and economic problems like climate change and feeding the world's burgeoning population are challenging humankind and have to be addressed with new measures and technologies. This is reflected, for example, in higher education: forward-looking courses like environmental management, ecological design or ecological logistics are being created and accepted, and prepare the younger generation for a sustainable future. The developments outlined here demonstrate that the notion of sustainability plays an important role in societies, in the education system and amongst decision-makers. It seems reasonable to assume that sustainability will continue to be a relevant concept for a long time to come.



# FAILURE IS PART OF THE PLAN

## Moritz Schularick on the role of failure in economics


AS RECORDED BY ULRICH PONTES

In economics, failure is not a big issue. As a discipline, economics primarily reflects on actions that maximise economic benefits, not on people producing unwanted results. Of course, economic theories and systems can fail. We only have to look at the banking and financial crisis to say that part of previously prevailing macro-economic concepts and relevant actors at the central banks and ministries of finance have indeed failed. We believed we had a model that adequately described our economic system and enabled us to keep the economy on a steady growth course by using targeted measures – and in the face of crisis, this approach failed. Even entire economic systems can fail, one example being Socialism. In economic terms, there was once an alternative organisational model for the management of scarce resources, but it turned out to be non-competitive and inefficient.

If you take this idea further, you may conclude that since the idea of competitiveness as a constituent principle of a market economy implies that only the competitive will prevail, the others must necessarily fail. This might affect entire economic systems or specific technologies – just think of the struggle for dominance among video systems some thirty years ago, or among computer operating systems today. Or it might affect individual companies. Moreover, under Capitalism many things have a short shelf-life. Technological progress has long since banished the video system that triumphed in its day to the realms of history.

But are all these things really failure? Most theoreticians would probably reject this idea and say that failure is an inherent part of the system, that not everybody can win, and that the new will always replace the old. And what about the entrepreneur whose product is overtaken by the competition? According to the

economic mainstream, he or she acts on the basis of rationally formed expectations and is aware of the risk from the outset. In other words, according to the economic behaviour model, humans always factor in a certain probability that their projects might go wrong, that something might thwart their plans. Anyone currently investing in Greek government bonds estimates the probability that the government may default and the investment fail, and demands commensurate compensation in the form of high interest rates. Therefore, this sort of risk is always an element of normal behaviour, it is calculated and priced in accordingly – so it is not really appropriate to speak of failure if the dreaded outcome actually happens.

There is a catch to this model: It only works if we put a probability on every possible future outcome and are able to quantify the risks. It is doubtful whether we can work on this premise. According to a distinction made by the economist Frank Knight, the world is not characterised by calculable risks, but by uncertainty. It is simply impossible to know what is going to happen with which probability. This leaves plenty of room for things to go wrong that were not expectable. Various schools of economic thought have since been in disagreement over how to deal with this uncertainty and its consequences. Individuals might fail economically – or at least perceive the fact that their plans have not come to fruition as failure. In standard economics, however, this is of minor significance. 

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*Moritz Schularick is a Professor of Economics in Bonn.*

# ‘MIGRANTS NEVER FAIL’

## The sociologist’s view: How people interpret their circumstances

INTERVIEW ULRICH PONTES

**JAM:** What is sociology’s take on the topic of failure?

**Magdalena Nowicka:** The notion of failure is mainly addressed in market and economic sociology. There is a term called absolute failure, which is used when an organisation ceases to exist. A relative failure occurs when an organisation continues to exist but does not meet its objectives. And now you can see why the concept of failure is so difficult: it is always measured against the criteria that constitute success. One could say that failure is ultimately an artefact of whichever definition of effectiveness and performance you apply. And you can, of course, always modify the criteria so that the actual outcome is not perceived as failure.

**JAM:** And apart from organisations, what about the individual level?

**Nowicka:** From the sociologist’s point of view, failure is a problematic concept as it tends to be more a realm of psychology than sociology. People fail if they don’t conform to social norms – that is, if they fall short of a standard biography at any stage, be it in education, work, relationships, or family. In our individualised society, anyone who has any such deficits

will generally be perceived to be at fault: the individual is responsible for his or her failure because he or she did not try hard enough. The welfare state encourages this tendency by seeing it as its duty to create a level playing field, but denying responsibility for the individual’s success. The welfare state is expected, for example, to provide equal access to education for all – but beyond that, it is up to the individual to actually achieve graduation. In sociological terms, it is often considered irrelevant if an individual fails and is left to cope with this failure. After all, sociology studies groups and interactions, not single individuals. You can argue, of course, that an individual is never fully autonomous. Which is why some sociologists consider failure, or rather strategies to cope with it, in the context of action theories: How does the failed person rebuild social contacts, how does he or she create a new presence in the social sphere? But I don’t find this approach very convincing.

**JAM:** Why not?

**Nowicka:** In my own research – which does not explicitly deal with failure, but mainly with migration – I have found that people absolutely refuse to say: I failed. In a certain

sense, they never fail, but always find ways to present themselves as successful. And therefore I find it more interesting to examine the norms of success and the way it is handled.

**JAM:** And how do they manage never to fail?

**Nowicka:** By treating social norms and benchmarks of success with sufficient flexibility. Maybe also by redefining their own goals before failure can actually occur. And by doing what is also called biographical work – which on the one hand, is about actively shaping one’s own life under the constant risk of failure, and on the

**Failure ...**  
**... shows us the way**  
**to many other, better**  
**questions.**  
**Emanuel Towfigh**

other, about reworking one's narrative retroactively and presenting oneself as a successful individual, no matter what happened before. And that can really be hard work!

**JAM:** So does that mean failure is purely subjective?

**Nowicka:** There is a subjective evaluation, but it is always partly determined by social norms. You can only make a statement like 'I don't have a job, which means I failed on the job market' because it is socially established that having a job is relevant – a paid job, that is. How bad it is subjectively not to have a job is something each individual can judge differently. But the fact that one is compelled to make such an assessment in the first place demonstrates the social, structural influence. Migrants are under even greater pressure. You have to justify leaving your family behind, your environment, your entire previous life. The only legitimate reason for emigrating is if it helps you to improve your situation. However, you can then define this improvement in different ways.

**JAM:** And people will always find something they can sell as an improvement?

**Nowicka:** It's not quite that simple. Migrants can argue that living abroad is worthwhile because they get to see the world. Or, something that can be observed in female migrants, they defer their expectation of improvement to the future and shift the benchmark from their own current situation to their children's prospective situation. Others are looking for personal freedom. When I interviewed

Polish migrants in the United Kingdom, I also talked to homosexuals who were able to live out their sexuality in the UK, which would have been unthinkable at home. In cases like this, criteria like work and making money become relatively less significant, but they are never completely irrelevant.

**JAM:** So that means success at work is a must? But how do you build this into your narrative if it is not actually going well?

**Nowicka:** Mainly by constructing an appropriate frame of reference that limits your outlook and shuts out a lot of things. For example, Poles in the UK, who often don't make a lot of money, will not compare themselves with Brits or migrants from other places, but only with other Poles – and will tell you about other Polish migrants who failed. If their own income is unsatisfactory, they will emphasise the prestige of their work. If that is also disappointing, they will say that they can still afford a used car or a great television set, and so on. Often, they could have everything that constitutes their 'success' back home in Poland, too. But that is what makes it sociologically relevant for me: Because migrants can construct their frame of reference across borders, they have new ways of not failing, so to speak. But one can also sense that people are sometimes quite on edge. And I have seen cases where constructing

success no longer works, at least not with one's own family. For example, homosexuals who were happy with an inferior job in the UK because of the sexual freedom they enjoyed, but who would not or could not talk about it at home. That made it very difficult to justify their situation to their families – or they stopped talking to them altogether. ✿

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*Magdalena Nowicka is a Professor of Social Sciences at Humboldt-Universität zu Berlin, where she is setting up the project 'Transforming Migration: Transnational Transfer of Multicultural Habitus' (TRANSFORMIG) with the help of a Starting Grant from the European Research Council. She has been a member of the Junge Akademie since 2009.*

## Failure

**mid 17th century (originally as failer, in the senses 'non-occurrence' and 'cessation of supply'); from Anglo-Norman French failer for Old French failir  
Oxford English Dictionary**

# THE EDUCATOR

Wolfgang Gaissmaier studies decisions. He knows when intuitions fail – and where science reaches its limits

TEXT ULRICH PONTES | PHOTO ARNE SATTLER



*Wants to help people to make better decisions: Wolfgang Gaissmaier at the Max Planck Institute for Human Development in Berlin*

People are afraid of dangerous things – but sometimes the real danger is their fear itself. Take for instance fear of flying. When it became particularly widespread after 9/11, many Americans stopped flying and used their cars instead – which resulted in some 1,500 more people being killed on the roads than in previous years. ‘A successful second strike for the terrorists,’

Wolfgang Gaissmaier analyses drily. ‘Sometimes we don’t fear the things that actually kill us. This is a failure of our instincts, our intuitive safety strategy.’ Whereas if you look at it objectively, the case is clear, the risk researcher emphasises. ‘You only have to drive 20 kilometres to be subject to the same mortality risk as when you are taking an intercontinental flight.’

# Failure

## In the lab, failure is part of our daily life.

**Robert Wolf**

‘How to make the right decisions,’ ‘Certainty is an illusion,’ but also ‘Listen to your gut reaction’ – Wolfgang Gaissmaier’s work at the Harding Center for Risk Literacy revolves around questions like these.

Which is obvious the minute you enter the foyer of the Max Planck Institute for Human Development in Berlin to which the centre belongs. The walls are covered with press reviews containing these and similar headlines. The majority of the quotations were penned by Gerd Gigerenzer, Gaissmaier’s long-term boss and mentor. Together, the two of them head up the risk research centre; together, they have published a study on the impact of 9/11 on fear of flying.

### The power of the gut reaction

A precision parting in his hair, a slightly rakish three-day beard on his chin, Wolfgang Gaissmaier sits in his small office and explains his work, illustrated by expansive gestures. He investigates what goes on in the minds of people who have to make a decision and are faced with the typical problems: they are aware of the options and their probability of success but they are still unclear about the right course of action. Or they are confronted with a completely incalculable situation. ‘In a nutshell, it’s about decisions governed by risk and uncertainty – and how to empower people to make better decisions.’

And this means, amongst other things, understanding when our gut reaction points us in the wrong direction. Gaissmaier, who studied psychology, cites another example in addition to fear of flying: ‘If you are playing roulette and black comes up five times in succession, you know that this has no bearing on the next throw. But your instinct is very insistent that now it’s going to be red.’ This illustrates how difficult it is to ignore your gut reaction – a phenomenon he himself knows only too well. ‘We have small children,’ Gaissmaier explains, ‘and I actually go out and buy a “low-radiation” babyphone, although I know full well that radiation decreases by the square of the distance. So there’s absolutely no problem as long as it’s not too close – but I still let myself be duped by the “low-radiation” seal.’

The discrepancy between gut reaction and reality is, however, not the rule. On the contrary, intuition and gut reaction are often very good guides, according to the decision researcher, because unconscious decisions frequently follow very simple strategies, so-called heuristics, and are therefore particularly good. ‘Our research has shown that the rule of thumb is: the more uncertain and complex the world, the less information you should consider.’ Gaissmaier chooses one of many simple empirical examples to illustrate the point: amateurs often predict the results of the World Cup better than professionals – because they are less interested in it, know less about it and simply say, Brazil will win anyway, instead of worrying their heads about Ronaldo’s poor form. ‘These old premises about more information and more thought producing better decisions are something we can now refute.’

Apart from the psychology of decision-making processes, the decision and risk researchers at the Harding Center, who come from many different disciplines, also address concrete applications such as the benefits and risks of medical procedures, global sustainability or the aforementioned dangers of road traffic. In addition to research, their tasks include actively channelling their insights into the public debate – which is why Wolfgang Gaissmaier sometimes swaps his casually elegant working clothes for a tailored three-piece suit and takes part in panel discussions, holds lectures for non-specialists and gives interviews to journalists from all media. As such, he has long been familiar with the additional tasks he took on a year ago in another context: in 2012, Wolfgang Gaissmaier became a member of the *Junge Akademie* where research activities at the intersection of academia and society are one of the three main focus areas.

### ‘Often there is no such thing as an objectively good decision’

Gaissmaier never tries to tell people what the right decision is. ‘In many cases, I don’t think there is any such thing as an objectively good decision.’ Rather, every individual should make decisions according to his or her personal priorities. Wolfgang Gaissmaier sees his mission in helping people to do so. It is important to him to make people have trust in their decision strategies and provide them with helpful information. But unlike other researchers, he would never preempt a decision and



demand, for example, that all cyclists wear helmets – because weighing the importance of safety versus dignity is a very personal matter. ‘There are decision researchers who basically dismiss human beings as hopeless cases. Here at the Harding Center, on the other hand, we believe that if people have the right kind of information they are in fact able to make good decisions for themselves.’

### The ‘dark side of the force’ is not an option

In many respects, Gaissmaier’s boss, Gerd Gigerenzer, has become a role model. As a student he attended one of Gigerenzer’s lectures, he explains, palpable enthusiasm starting to creep into his narrative. ‘I was so impressed that I immediately wanted to do a PhD with him. He is so passionate about his work – when I was a student I only encountered a handful of professors who were like that.’ Wolfgang Gaissmaier immediately switches back to the plane of intellectual reflection: ‘There you have it. Simple social heuristics again: if someone else gets enthusiastic about a topic there must be something interesting to it.’

The decision that followed was clearly a good one: for more than ten years now, Wolfgang Gaissmaier has been working together with Gerd Gigerenzer. His dissertation received numerous honours, such as the 2008 Otto Hahn Medal for outstanding scientific achievements. Recently, the Association for Psychological Science named him a rising star in his discipline (see p. 44). He now regards his basically unplanned career as a researcher as inescapable. ‘Of course, one could go over to the dark side of the force,’ he says with a slight grin. One could – but for him it is not an option. He does not want to relinquish his status as what he refers to as “a court jester” who is free to hold up a mirror to others – because in any other job he would ultimately have to represent the interests of his employer.

Being a neutral educator does not make Wolfgang Gaissmaier apolitical. Together with other members of the *Junge Akademie* he is involved in investigating how much medical practitioners really know about the so-called PSA Test which is used for early detection of prostate cancer. However, scientific studies have come to the conclusion that it probably does more harm than good. Due to the lack of robust data on efficacy, public health insurance providers in Germany do not cover the costs of the test – it falls into the category of IGeL (individual health

benefits) for which patients have to pay themselves. ‘So it’s really important that doctors know about the benefits and harms of the test and inform their patients accordingly. If this is not the case, the issue becomes politically relevant and highlights the fundamental problem of IGeL benefits,’ says Wolfgang Gaissmaier, explaining the idea behind the project that is being conducted in the Ethics in Practice Research Group (see also the group report on p.34).

### ‘CVs only contain the things that worked’

Based on his critical, educational stance, Wolfgang Gaissmaier has clear opinions on other issues, too. He argues vehemently against homoeopathy, for example, calling it a “scandal” not to vaccinate children against measles, and also admits to being highly sceptical about religion. At the same time, he emphasises “with great humility” that scientific findings will inevitably be provisional and uncertain. ‘It’s no coincidence that one of my guiding principles is that quotation by Benjamin Franklin about nothing in life being certain except death and taxes.’

And, generally, Wolfgang Gaissmaier seems to be quite relaxed about his own fallibility. Indeed, on the topic of failure, he not only talks about the lack of success of intuitive safety efforts but is also quite open about his own personal failures: how he once nearly ruined a major experiment by being careless, or how he applied for prizes which he didn’t get. Without this degree of openness, junior researchers would get a completely wrong impression – and then, defeated, potentially make a bad decision. ‘CVs only contain the things that worked, but you have to assume that there were far more things that didn’t work.’

# THE ACCIDENT PRINCIPLE

Distortions or the partially controlled failure of photographs are growing more and more popular, also in digital variations

TEXT + PHOTOS EVELYN RUNGE



*Flaw or feature? The Yungang Grottoes in Datong/China, ...*

The woman is hunched over a white bowl, eating. She is sitting on a step, dressed in a white shirt and black trousers. Next to her, a dog is peering out of its kennel right next to a goat pen. From the roof of the dwelling behind them, a satellite dish looms against the sky.

The right part of the photograph, which I took in China in 2008, is clearly recognisable. A third of the photograph on the left is white. The two parts blend, they are not sharply delineated. The transition has a fuzzy texture resembling clouds in a blue sky, and it appears that a second woman is entering the scene from a thick mist, her face shown in profile under the brim of her straw hat. All you can see of her body is a tiny part of her arm and her right hand with which she is propping herself up on a stick.



*... the village of DongGe Tuo and ...*

According to usual editorial standards, this photograph would be discarded and not published. It tells only part of the story. It seems incomplete, faulty – a failure. The beginning of the film was exposed to light before the roll disappeared in the camera casing. Photographers try to avoid this light exposure on the first few takes by winding the film forward inside the closed camera – release the shutter, wind, release the shutter, wind. The first actual picture will thus be taken on fresh, unexposed film and have no flaws.

Many observers still judge the quality of a picture by criteria such as sharpness, correct light exposure, contents that are easy to grasp. Anything else will be considered art, even if that was not the photographer's intention.

# Failure ...

## ... is an opportunity: an opportunity to have another go

### Sibylle Baumbach



... the queue in front of Mao's mausoleum – all taken at the beginning of the film

Distortions or apparent failure as an aesthetic principle can also be produced mechanically. Accident is always an aspect of this goal, at least in analogue photography. Pinhole cameras made of cardboard or old drinks cans have no optics in the form of a lens. It is hardly possible, and more importantly, not intended, to control the depth of focus and image section because image section and sharpness depend on the size of the hole through which the light falls, as well as the distance from the photosensitive material.

Cameras like the Holga or Lomo are easier to operate. Both were originally developed for mass markets, the Holga as an affordable medium format camera in Hong Kong, the Lomo for 35mm formats in Russia. In the past twenty years, both have found followers in Europe, out of nostalgia as well as a desire for

a visual counterculture – because photographs taken with Holgas and Lomos automatically come with blurring, distortion, vignetting and shifts in colour tone.

Surprises in colouring are not only tolerated, they are desired and can be intensified, for example by using expired film. Doing so is not a sign of aesthetic or technical failure: play and openness are inherent to the process. “Lomographers”

(the term “Holgographers” has not yet caught on) have drawn up their own rules and published them online. Numbers 8, 9 and 10 may be the most important, since they focus on the principle of accident: ‘You don’t have to know beforehand what you captured on film,’ ‘Or afterwards’ – and: ‘Don’t worry about any rules.’ (In this day and age when the notion of “security” is a much used euphemism, whether in politics, advertising or finance, this almost reads like a manual for how to live a free life, which always involves accident and risk.)

These images, which start out as analogue photos, have long become hybrids. They are digitised and published on photography platforms, where they henceforth exist as “digilogs”, with a community that comments on, celebrates, loves and sometimes copies them. Programmes for mobile and smart phone cameras offer similar optics that are reminiscent of analogue photography. “Retro-apps” such as Hipstamatic, Instagram, Infinicam or Retro Camera use filters that produce vignetting and imperfections. Some of these apps imitate another analogue technique that was popular with amateurs as well as professionals for a long time: they put a white border around the photo, and as was the case with the classic Polaroid picture, this border is wider at the bottom. With analogue instant pictures, this broad white border has a function. It contains a small pocket of chemicals. The moment you pull the Polaroid out of the camera, the pocket opens and the chemicals spread. The image begins to develop.

Accidents such as unevenly spread chemicals, light exposure, or shifts in colour tone due to the storage of the film or paper past their expiration date are suppressed in smart phone camera apps. Distortions are no longer left up to chance. Failure is made impossible. But this very failure is productive and creative: It produces perspectives that are unexpected and allow us to make new discoveries.



# UPDATING RELEVANCE & UNEXPECTED GUESTS

## Institutions between flexibility and failure: a conversation about rules and exceptions, openness and authority, theatre and law

INTERVIEW ULRICH PONTES

**Emanuel Towfigh:** Melanie and Bernhard, you are currently packing up your staged institution after months of preparation and eleven days of making it a reality – does that make you wistful?

**Herbordt/Mohren:** Yes – then again, we think the project was a great success, and it could only work that way because it existed for a limited time – because it was a sort of exceptional state for everyone. Many people, including ourselves, were present almost continuously. If we had planned for a longer duration, we would not have been able to do that and it would have been a completely different set-up.

**JAM:** An inherently short-lived institution – that doesn't sound very typical.

**Herbordt/Mohren:** Not typical for an institution, but essential for a theatre project.

**Towfigh:** Yes, I also felt a definite tension in your production, especially as institutions actually live by regularity and order.

**Herbordt/Mohren:** The limited duration was an essential element of our project, though. We wanted to create a space where people could play with structures and rules at will. We were thus able to experiment in ways that would have been impossible or doomed to failure if consolidation had been our intention from the beginning. But we should also say that we were far from providing an actual blueprint for a viable institution. Rather, it was the verbalisation of a possible institution, at all times, in each individual element, and thus more of an art project. Never-

theless, we did discuss possibilities for dealing with existing institutions in a productive or meaningful manner, for example in the context of 'Performing Institutions.'

**JAM:** Did you draw any conclusions or gain any essential insights?

**Herbordt/Mohren:** We have not had time for a final reflection yet. But there was, in a way, a recurrent moment, brought up by Marcell Mars, a cyber-activist from Zagreb who deals with lending libraries in the digital age. He said if lending libraries were to continue to operate in their traditional form, they would no longer be able to perform their social function of providing continual access to literature and knowledge. Therefore, this old institution is in urgent need of an update. To transfer this thought to our project: We are working on providing the same sort of update for the theatre, this old and socially relevant institution, so that it will not manoeuvre itself into rigidity and, subsequently, irrelevance. Iris Dressler, Director of the *Württembergischer Kunstverein*, made another important point. She mentioned the importance of opening up new spaces and defining an art institution as an integrative rather than an exclusive concept. She cited an example that brings us back to the theme of regularity: the unexpected guest. Thus the question is how an institution can deal with the unpredictable, how it faces the unexpected. This is a very productive thought for the theatre, which by tradition largely depends on rehearsed actions and a precise concept of how things are supposed to evolve.

**JAM:** Institutions, for all their consistency, therefore also need a considerable degree of flexibility if they are going to remain



THE ARTIST DUO

*Herbordt/Mohren recently staged 'The Institution' in Stuttgart – a mixture of installation and home, public lab and theatre. In the course of eleven days, an interplay of space, sound and video installations, performances, talks, lectures and audience was supposed to create a fictional, staged institution and address the question as to the form and structure in which art can play a relevant role in modern society ([www.die-institution.org](http://www.die-institution.org)).*

relevant and able to face the unexpected – does our law expert agree?

**Towfigh:** From a legal perspective, I agree that institutions are designed to be permanent, but changeable. On the other hand, institutions typically seem to have a certain tenacity or resistance to innovation.

**Herbordt/Mohren:** When we talk about flexibility, we should differentiate more. Neoliberals argue for flexibility that leads to increasingly precarious work structures – in the theatre, as well. That is not what we are talking about here. The other meaning of flexibility is a fundamental modernisation of the institution. This is the sort of flexibility it will take to overcome the current legitimacy crisis of municipal and state theatres, which nowadays



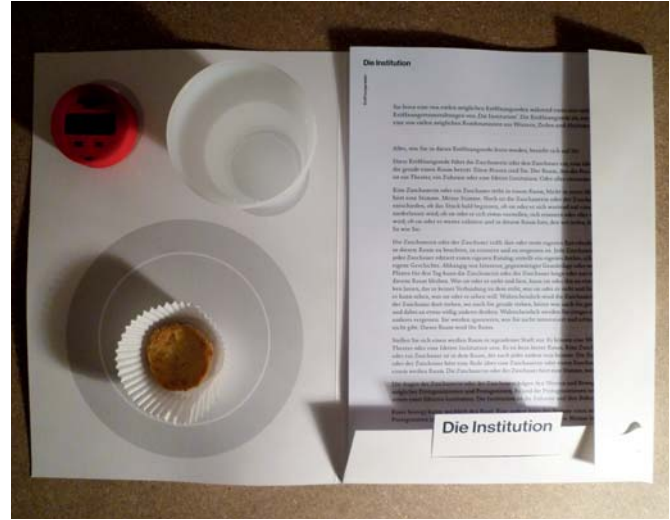
THE LAW EXPERT

*Emanuel Towfigh is a Senior Research Fellow at the Max Planck Institute for Research on Collective Goods in Bonn. In the context of his habilitation project 'Democracy without Parties,' he studies the formative impact of institutions on culture and how they can be changed within a given, complex context. The RG Art as Research?, together with Emanuel Towfigh, visited 'The Institution' as part of the 'Performing Institutions' series of lectures and talks.*

only spark the interest of a minute percentage of the population.

**JAM:** But don't many institutions face crises of legitimacy? Just think of the state and political disenchantment, or the church and its struggle for relevance.

**Towfigh:** I think an institution can fail in the sense that its outer shell continues to exist, but in a certain way it is uninhabited. And sustainable success probably depends on just how well an institution is able to reinvent, restructure itself. At the outset, an institution is needed in order to meet a challenge or solve a problem. At some point, however, due to changing circumstances as well as its own activity, the institution becomes somewhat superfluous. It can even fall victim to its own success, religion being one example, in my opinion. People often say it has out-



*The premise of the eleven-day experimental staging of 'The Institution' was 'the promise of a different social relationship, the model of an institution that integrates what used to be excluded'.*

lived its usefulness, which does rather sound like failure, but the fact that it has lost its appeal may be due to the fact that it had a very formative effect, so that the contrast between the ideal it strove for and the reality against which it clashes has diminished. The question is: Is that failure or success?

**JAM:** Is permanence bound to become problematic? 'The Institution' is announced as an 'institution that must remain temporary in order not to become authoritarian itself' which seems to imply that it is.

**Herbordt/Mohren:** Looking at theatre, at least, institutions have an unfortunate tendency to claim exclusive necessity for their individual, concrete concept – they basically claim a monopoly on a certain aesthetic form or a way of fulfilling their social role. However, in the long run, such a claim to authority cannot do justice to the complexity of a social issue. An institution is established to address a certain initial issue, and as a rule, this issue will become differentiated in a much short period of time than it takes an institution claiming such authority to respond. And then at some point, this claim to authority is the only thing left to uphold the very continuity of the institution, because it has long been overtaken by the complexity of the problem.

**JAM:** The example of the church might illustrate this nicely: The exclusive authority claimed by the Catholic Church, for

example, clashes with a significant degree of differentiation that has developed over the course of 2000 years.

**Herbordt/Mohren:** In any case, this reflection leads us back to the central role of hospitality in our staged institution: To be ready for the unexpected guest means that you value the openness to respond to any issue that arises over a prepared response.

**Towfigh:** One could combine the notion of the unexpected with the great debate about rules and exceptions. Traditionally, institutions can only handle the expected, which is also a permanent problem in the legal system. This is what caused the spectacular failure of the *Allgemeine Preußische Landrecht* with its 19,000 plus articles. The attempt to regulate everything down to the tiniest detail became so complex that the law could no longer be properly applied, whilst still leaving enormous gaps.

**Herbordt/Mohren:** The gap is thus the unexpected guest. Or, more precisely, the insight that any set of regulations contains gaps is what becomes the unexpected guest, despite all expectability ...

**Towfigh:** That is interesting, because you can still expect the unexpected guest!

**Herbordt/Mohren:** Yes, you can anticipate that, at some

point, an unexpected guest will show up. You just don't know what he will bring with him.

**Towfigh:** Recent legal debate, however, has seen disagreement over whether exceptions even exist, or whether the exception is an inherent part of the rule, so to speak. Or, to stick with our metaphor: Since we are anticipating the arrival of the unexpected guest, couldn't we also set rules for how we are going to deal with him? Let me assume that there is more to the temporary nature of your institution than just the constraints of practical feasibility: in which case it would really also be a special quality of an institution if it plans for its own termination, for the moment when it becomes redundant.

**Herbordt/Mohren:** Because this allows for a different way of addressing the initial issue.

**Towfigh:** But we also have to acknowledge that the mere existence of your institution also changes things, of course. The possible answers that existed prior to 'The Institution' may not all still exist afterwards.

**Herbordt/Mohren:** But isn't that already becoming authoritarian?

**Towfigh:** Is that authoritarian? You cannot assume that you won't change anything. If one model actually generates a positive or negative insight, this insight will rule out other options. As an analogy, let's take Heisenberg's Uncertainty Principle, where observation alone changes the result. Therefore I believe that our institutions and our theories behind them are never innocent: Our model itself, the way we look at the world, excludes or favours certain institutional characteristics. If we look at everything through the lens of Rational Choice or Game Theory, our answers and our behaviour change accordingly. Now, if you want to use the term "authority" for this, then it means that knowledge, or insight, or truth, whatever you want to call it, inherently has something authoritarian about it.

**Herbordt/Mohren:** That makes it even more important to at least create awareness for it. Because it really does change things: The level of awareness with which I do something, even something unalterable, still changes how I do it.

**Towfigh:** Yes, precisely!


**JAM:** But can you incorporate such a level of reflection into the

nature of an institution? Doesn't the moral responsibility always lie with the individual actors, at least to some extent?

**Herbordt/Mohren:** It would be interesting to hear Pirkko Husemann's opinion on this (*editorial note: see new members, p. 24*), because she is working with existing dance institutions on precisely how they can integrate this level of reflection about their own history and make-up. And there are a number of attempts to integrate reflection into blueprints for new institutions from the very start. Yes, I would say that it is possible to incorporate it – it is simply a level of self-reflection that requires tools. It is a process that can be planned for: Stepping outside of one's own actions for a moment and reflecting on them with a view to the future.

**Towfigh:** I agree. For me, institutions are ultimately nothing but rules, and of course, rules can include the option of reflecting on them. This is also true if you use the colloquial definition of the term. Take the political system, for example. The Supreme Court is the guardian of the Constitution – one of the instruments designed to focus on the meta-level, so to speak.

**Herbordt/Mohren:** We think that that inevitably leads to the integration and programming of a permanent, recurring restart. During 'The Institution' this happened in a very concrete and palpable manner: There were two performers who continually followed a code, rules of play that were not designed to create a performance, but a child-like form of play, doing something. And incorporated into this game was an interruption that occurred every 8 minutes and 31 seconds (*editorial note: see Junge Akademie Magazin 14/2012, p. 26*): Both performers meet, look at each other, and make a decision based on a very differentiated set of rules that have an impact on the respective other. So there is this regular moment of pause, when one of the two triggers a restart.

**Towfigh:** On the topic of the programmed restart, I can think of an example from the legal system. Article 146 of the German Basic Law determines how it will lose its own validity: 'This Basic Law, which after the achievement of Germany's unity and freedom applies to the entire German people, shall cease to apply on the day on which a constitution, adopted by the free will of the German people, takes effect.' So it is quite possible for an institution to pre-programme its own re-launch and try to subject it to certain rules. I suppose this openness towards the new, this reflection about their own limitations and finitude, is something that is inherent to successful institutions. 

# What is Failure?

Members of the  
*Junge Akademie*  
give their  
answers

**Failure is positive for those who know how to handle it.**

The risk of failure, not fulfilling our own expectations and those of others, drives our constant quest for progress, knowledge and economic development.

However, failing successfully is probably something we have to practise – because recovery seems to be harder for those who are caught unprepared. An exemplary illustration of this is the collapse of the USSR: the sudden dissolution of state institutions as the guarantors of economic security led to impoverishment and desperation amongst the population which had no experience of economic risk. Given this, it is all the more astounding with what degree of entrepreneurial initiative many people in the successor states of the USSR actually responded to the innovations.

*Alexander Danzer is a Junior Professor of Economics at Ludwig-Maximilians-Universität München (LMU).*



In empirical social research we often work with behavioural hypotheses. I have yet to experience a hypothesis that could be completely and unambiguously proven without being modified. Does this mean we fail every time? Indeed. But what this **Failure** shows us, the difference between our model and what we see or believe we see 'in reality', **shows us the way to many other, better questions** and eventually to an adequate degree of understanding. Of course, it would be nicer, easier if we could get there without failing, but the feeling of having overcome failure, of having wrested something from the crisis, is highly satisfying.

*Emanuel Towfigh is a Senior Research Fellow at the Max Planck Institute for Research on Collective Goods in Bonn.*

**Failure is an opportunity: an opportunity to have another go,** to fail again – to fail better, first of all to take a deep breath, say goodbye to some of your perfectionism and, in the certain knowledge that you will fail again, stop taking yourself and your achievements so seriously. In the spirit of Samuel Beckett: 'Ever tried, ever failed, no matter. Try again. Fail again. Fail better.'

*Sibylle Baumbach is a Junior Professor in the Department of English and Linguistics at Johannes Gutenberg University Mainz.*

**Failure as such is not a bad thing. It is just the unintentional outcome of having given something a try.** If you never attempt anything, you will never fail, but you will never achieve anything either. One of the Dalai Lama's rules for living says: 'When you lose, don't lose the lesson.' We do learn from our defeats and can grow as a result. Apropos: what happened to Bayern Munich who 'failed

so lamentably' as the runner-up in the final of the Champions League in 2012? QED.

*Dr. Daniel Chappell is Associate Professor and anaesthesiologist at the University of Munich Hospital (KUM).*

### **In the lab, failure is part of our daily life.**

I first found out that failure is part of everyday life in the laboratory while I was working on my master's thesis. My supervisor told me then: 'Every twentieth reaction, you will get a result!' Not exactly encouraging, although he did phrase it positively. One cannot deny that, to this day, most new reactions we carry out in the lab are not successful in spite of all the promising approaches to design new reactions, for example with the help of quantum chemical calculations. What is really bitter, and every inorganic chemist will probably sympathise, is when a reaction works in the lab just once, but never again. For whatever reason, some reactions simply can't be reproduced. Is failure nevertheless productive? In chemistry, efforts to disseminate our knowledge about the results of failed and non-reproducible results in the scientific community have attracted little attention – although they could deliver extremely valuable information to help investigate the reasons why the chemical reaction failed. Admittedly, the many factors that contribute to the formation of a desired reaction product are not always easy to analyse. To discover why a reaction doesn't work is usually at least as complicated as establishing why another one did. So in most cases it is simply more productive to try out a new idea – and the reasons for failure therefore remain a mysterious.

*Robert Wolf is a Professor of Inorganic Chemistry at Universität Regensburg.*



# NEW MEMBERS



## ALEXANDER DANZER

Alexander Danzer, junior professor at LMU Munich knows precisely why legally restricting the number of cars in a wedding procession to three does nothing to combat poverty: he has discovered that bridal couples in Tajikistan now simply rent three luxury white stretch-limos as a status symbol – which are just about as long and at least as expensive as the traditional 30 or 40 decrepit Ladas. Alexander Danzer likes investigating the (im)possibilities of social policy and the creative potential of people's economic behaviour on location. His quest has taken him to the Ukraine, Namibia, to Berlin, Moscow and London. We are curious to learn more about economic-ethnological voyages of discovery.

## TOBIAS ERB

He is fascinated by the infinite diversity of nature. He looks for, and finds, the big issue in the tiniest item. Microbiologist and biochemist Tobias Erb decodes the metabolic pathways of micro-organisms with his junior research group at ETH Zurich. He wants to elucidate the tiniest components of life in the global cycle. To this end, he travelled half way round the world after finishing his doctorate and spent two years working on research in the US. But he is not satisfied with just understanding. In the lab he creates artificial metabolic pathways in order to generate biological systems with new potentialities. We are looking forward to experiencing how the creativity of the human intellect can challenge natural mechanisms.



## LENA HENNINGSEN

'The Chinese copy everything.' In her dissertation, Lena Henningsen strongly refutes this claim – whereby product piracy is close to her heart: as a child she wanted to be a pirate. A junior professor for Chinese Studies in Freiburg, she is currently more interested in the Chinese literature of the 1940s and in China's popular culture. Thanks to her, we know that the success of Starbucks has less to do with coffee than with a feeling of belonging to the West, particularly amongst younger, more affluent Chinese. We are sure that we shall not only enjoy the coffee breaks together at the *Junge Akademie*, but are looking forward to many discussions which will not leave us puzzled.

## PIRKKO HUSEMANN

A storeroom full of theatre programmes, posters and DVDs on the topic of dance – and in between the piles two feet stick up in the air. If someone is practising headstands it can only be the theatre scholar and dance dramaturg Pirkko Husemann. She is investigating the recent history of German dance institutions, particularly the relationship between dance, institution and criticism. She combines research and teaching in Hamburg, Cologne and Berlin with work on stage as a dance dramaturg and curator, as well as her artistic research project 'Coexist.' She is obviously the ideal person to join the RG Art as Research? and we are curious whether she is going to turn us upside down or ask us for the next dance.



## TOBIAS KÜMMERLE

The South American Chaco, the Caucasus, the Tundra in Siberia: these are the exotic places where Tobias Kümmerle conducts his research. A guest professor of biogeography and conservation biology at Humboldt-Universität, he investigates globalisation, climate change and land use. When he is actually in Europe he roams the forests and lakes around Berlin or renovates his holiday cottage in Sweden. Anyone who is thinking this is all 'off the record' is not so far wrong. He collects old jazz and soul records and is constantly on the lookout for new gems. We'll show him that the *Junge Akademie* also possesses a treasure trove of surprises and are delighted about his enthusiasm and energy.

TEXT DANIEL CHAPPELL AND KATHARINA HEYDEN/EDITORIAL TEAM



### JAKOB MACKE

There are things that are a contradiction in terms: honest tax declarations, non-alcoholic beer or theoretical neuroscience. Jakob Macke deals with the latter as a junior research group leader at the MPI for Biological Cybernetics and the Bernstein Center for Computational Neuroscience in Tübingen. He caught the attention of his mentor when he was not only the youngest participant at a congress but the one who asked the cleverest questions. Today, he asks how the brain processes information and makes decisions by developing models and algorithms to analyse neural processes with neurobiologists, psychologists, physicists and computer scientists. We hope he will also help us to bundle our chaotic interdisciplinary thought processes.

### WOLFRAM PERNICE

That men are always boys at heart is demonstrated by the following statement: 'It's like playing with lego, only smaller. We shine lots of coloured lights around and fiddle about with ice and steam.' This is how Wolfram Pernice describes his work as the head of an Emmy Noether junior research group at the Karlsruhe Institute of Technology where he uses light both as an information carrier as well as for power transmission. But his broad shoulders probably have more to do with rowing and gardening than with turning on all those little light switches. We are thrilled about this new member who will not only be able to keep a firm grip and skilfully steer our boat through the water, but also hopefully illuminate many of our discussions.



### MORITZ RENNER

There are people who have always known where they wanted to go. Moritz Renner began his career as a student assistant at the Berlin-Brandenburg Academy of Sciences and Humanities. As a law student he received an Erasmus Fellowship, support from the German National Academic Foundation and the DAAD, and was awarded the German Science Prize. He is like the FC Bayern Munich of young law scholars. From his home in Berlin he commutes to Bremen where he focuses on transnational concerns and credits as Lichtenberg Professor – which elegantly brings us back to FC Bayern Munich. The *Junge Akademie* is committed to recruiting the very best people. We are, therefore, delighted that our new member has signed a five-year contract with no exit clause.

### VIKTORIA TKACZYK

Excavate, dig up, piece together – this is the research method adopted by Viktoria Tkaczyk, assistant professor of arts and new media in Amsterdam and Dilthey Fellow at the MPI for the History of Science. She compares her work as a theatre scholar with archaeology. Based on the traces of past performances she investigates how the theatre became a meeting place for sociocultural, scientific and media developments. And she also wants to be a high-flyer: she has investigated the theatricality and cultural history of flying and practises this art herself when she is not commuting between her workplaces in Amsterdam, Berlin, Munich, Madrid and Paris. We are looking forward to flying high with her and digging deep into the history of European theatre.



### HANS-JAKOB WÖRNER

Speed comes from Switzerland: Hans-Jakob Wörner develops procedures for imaging the movement of electrons in molecules using ultra-short laser pulses. His research has brought about a major advance in extremely short time scales and means we can now image previously invisible processes in matter. His path to a professorship (associate) in physical chemistry was also extremely rapid and took him via France and Canada back to ETH Zurich. Speed is a feature of his leisure activities, too. He whizzes through the mountains on a racing bike. We are very curious about blinding flashes in molecules and in our heads – and whether we shall actually manage to find out anything about him that is not high-speed.

# ALUMNI



## SYLVIA CREMER

Sylvia is passionately interested in the social behaviour of ants. Her interdisciplinary Antnet Project, which she undertook together with Fabian Theiß, not only sparked an enthusiastic response from the *Junge Akademie*, but from the reviewers at the journal 'PLoS Biology' as well. Sylvia is continuing her academy activities in Austria – since 2011, she has been a member of the *Junge Kurie* at the Austrian Academy of Sciences.

## KARIN DE BORST (NEÉ HOFSTETTER)

Karin's research focusses on building materials and biological material, and she gave us wonderful, passionate insights into the fascinating properties of her favourite material, wood. Many different activities meant she was closely associated with the academy. We should especially like to mention her work as head of the editorial team of the *Junge Akademie Magazin* which helped to shape the publication for a considerable time.



## OLGA HOLTZ

Olga moves back and forth between continents – between Berlin and Berkeley, analysis and algebra, screenplay and film direction. Her first film, 'The Zahir' is about the voiced and unvoiced rules and social stereotypes of science – a topic for the entire *Junge Akademie*.

## CHRISTIANE RITTER

Christiane deals with a different kind of film theme. Biofilms are her scientific research focus – or, rather, the 'Structure-function relationships of functional amyloids and other ordered/functional aggregates by means of NMR spectroscopy and other biophysical methods.' That sounds complicated, but only if you haven't heard Christiane lecturing on the subject. Her contributions to the topic of 'Visualisation' are fondly remembered.



## ULRIKE VON LUXBURG

A computer scientist, Ulrike investigates machine learning and artificial intelligence. But the machines are not the only ones to learn a great deal from Ulrike. The *JA* members did, too – in the RG Science Policy, by reading the 'Calendar of Ambivalence' which she created together with Klaus Oschema and Marc Helbling and also on the Board which, for one term, benefitted from her presence.

TEXT MAGDALENA NOWICKA AND ROBERT WOLF



### SIMONE SCHÜTZ-BOSBACH

Simone's themes are the perception and awareness of one's own body and the question as to what extent our body can constitute our mental self. Psychologist Simone contributed her mental self to the academy in many ways, including the *UniGestalten* Project and the organisation of the RG Sound(world)'s conference, 'Body Images in Art and Science.'

### LÁSZLÓ SZÉKELYHIDI

László's specialisations are fluid mechanics, partial differential equations, quasiconvexity – and unleashing inspiring, controversial plenary discussions on topics like simulations, research strategies and hype in science. László proved to us time and again that mathematics are not necessarily impenetrable: in the context of 'JA macht Schule', as the organiser of the hands-on exhibition, 'Experimental Workshop on Mathematics' and as the member of the Board responsible for finance. We shall never forget his plenary lecture during which he played with a football and had us all folding rigid surfaces.



### MATTHIAS WARSTAT

Matthias investigates the forms of applied theatre. At the *Junge Akademie* he spoke out on behalf of director's theatre, successfully handled heated discussions in the RG Sound(world) and shaped the dialogue between art and academia. He applied his knowledge and abilities as the speaker of the RG Art in Research? and at the 'Art and Academia' Salon.

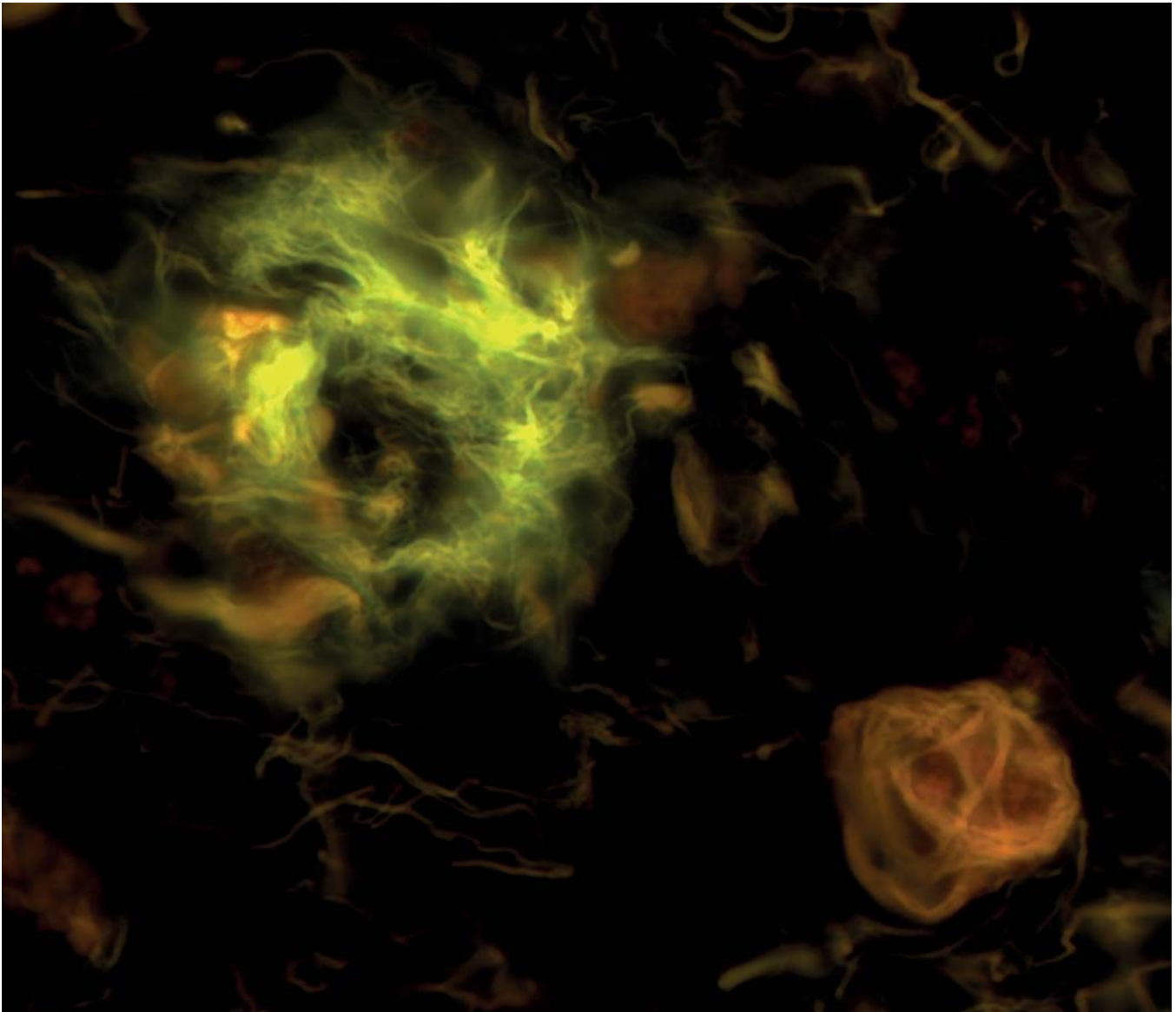
### ANNA WIENHARD

Anna's special fields that she addressed during her time in the *Junge Akademie* at Princeton and Heidelberg were geometry and topology, symmetrical spaces, rigidity questions and limited cohomology. But this was by no means all. Having studied mathematics and protestant theology she likes to work at the intersection of maths and art.



### MARTIN WILMKING

Martin invented a learning game on the potential and limits of sustainable energy handling which toured Germany on the MS Wissenschaft (a floating science exhibition). But Martin never spared his own energies when it came to being a member of the *Junge Akademie*. The landscape ecologist enriched our work as a member and speaker of the Board, in the *UniGestalten* Project and as the speaker of the RG Sustainability. Apart from all his many activities, we shall always remember him for his wanderlust and his advice on the best way of protecting oneself against bears in Alaska.



**1<sup>ST</sup> PRIZE (1,500 EUR): ROZALYN SIMON, PHD STUDENT AT LINKÖPING UNIVERSITY (SWEDEN):**

**DYING MEMORIES: IS THIS WHAT FORGETTING LOOKS LIKE?**

‘This is brain tissue from a patient who has Alzheimer’s disease. Using a single probe we are able to visualise the interplay between Amyloid Beta plaques and Tau protein neurofibrillary tangles. When exploring these biological correlates of neuron loss and AD pathology, I am suspended between the actuality of my research and the fantasy of illuminating lost memories and the dying neurons of those who eventually became lost, even to themselves. Is this what forgetting looks like?’

# ENCHANTED – SPELLBOUND – BEWITCHED?

## The fascination of science in pictures: the winners of the ‘Visions and Images of Fascination’ photo competition

TEXT SIBYLLE BAUMBACH

**‘I’d like to put in a vote for the intrinsic fascination of science.’**

*Joshua Lederberg*

There is no doubt about it: research is fascinating. It catches our imagination, sometimes robs us of our senses for the ordinary things in life and plunges us into worlds, be they in the lab, archives or even at home, that do not only appear foreign for outsiders, but often impenetrable. Even though today, the term fascination is rarely linked with its etymological origins in (black) magic (*fascinare* – cast a spell on, bewitch), research still seems to have a magical quality.

What is the essence of this magic that mesmerises us on the one hand and carries danger with it on the other? Does it lie in the attraction of the unknown, of the other, the hidden; or in the appeal and risk associated with breaking new ground in previously obscure territory? Or is it, as W. B. Yeats would have it, the ‘fascination of what’s difficult’ that drives scientists and scholars in their research?

To capture the fascination of one’s own research projects in words is no easy undertaking, but to visualise it is a much greater challenge. In an international photo competition entitled ‘Visions and Images of Fascination: Humanities and Sciences Visualised’ researchers decided to embrace this challenge. The competition was run by the *Junge Akademie* in cooperation with the young academies in the Netherlands (*De Jonge Akademie*), Russia (*Council of Young Scientists of the Russian Academy of Sciences*),


Scotland (*RSE Young Academy of Scotland*) and Sweden (*Sveriges Unga Akademi*).

The response was as overwhelming as the goal was noble: more than 500 photos were submitted by the countries involved, which can be viewed online ([www.imagesoffascination.net](http://www.imagesoffascination.net)). They provide an insight into ongoing research projects by trying to visualise their appeal and thus make them accessible to a broader public. A two-tier selection process was used. Initially, the young academies themselves conducted a pre-selection, on the basis of which an interdisciplinary, international jury of academy representatives and external experts identified the ten winning photos. This was anything but an easy task especially as the concept of ‘fascination’ does not lend itself easily to definition.

Fascination is an aesthetic category which should not be equated with the experience of overwhelming beauty. Fascination mesmerises the observer by capturing him or her in a tension between irresistible appeal and risk, demanding a certain distancing but not actually allowing it to happen. Something that is fascinating has a quality that is mysterious, magical, impenetrable: it may be unknown, uncomfortable or unreachable and thus becomes the object of attention. It cannot be comprehended at a glance – it demands a second or third look and thus draws the observer under its spell.

The ten winning photos fulfil this criterion. Some focus on research objects, others on research tools; some distort the objects that are familiar to experts in the respective field. But they all manage to visualise fascination, the intrinsic appeal and risks of

science, and to retain this fascination beyond initial contact with the image. They not only provide insight into ongoing research projects but also invite the observer to investigate the most diverse disciplines, to become immersed in strange worlds, at

least for a moment, and to return the look with which the image tries to win the observer over to academia – a look that is not evil, but seductive, that transports the magic and the appeal of research. 

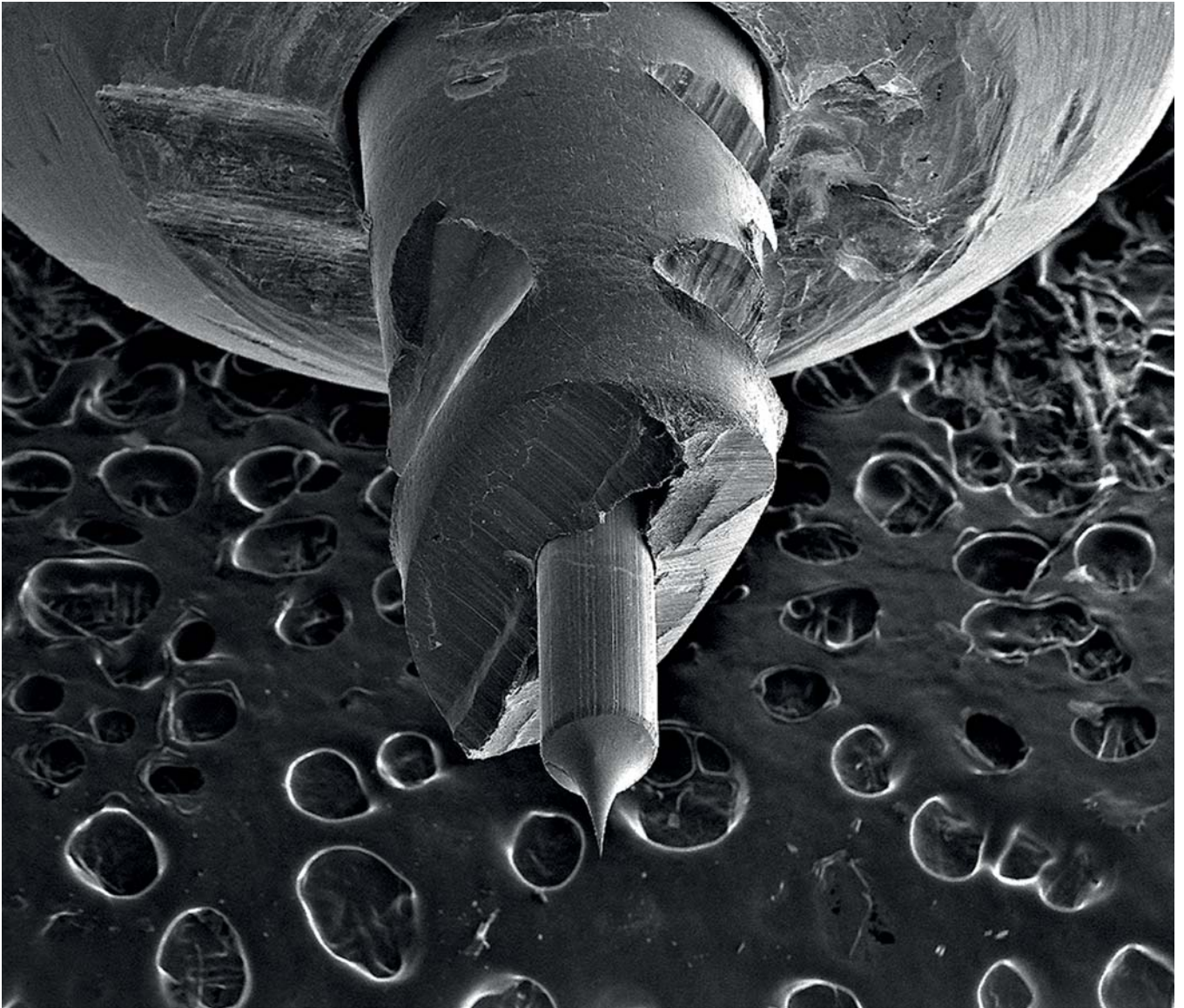


**2<sup>ND</sup> PRIZE (1,000 EUR): DOMINIC AKYEL, RESEARCH FELLOW AT THE MAX PLANCK INSTITUTE FOR THE STUDY OF SOCIETIES (COLOGNE):**

**SHADOW SOCIETY**

‘People are waiting at a train station, their shadows fall on the wall behind the rails. For me, this image is a perfect allegory for the remarkable disparities between individuals’ perceptions of the social world and its actual condition. Like the silhouettes in this image, our concepts of the social world are projections of our own conditioning that obscure the complexity of phenomena. The distant hope of raising awareness of this disparity is the greatest source of inspiration for my work.’





**3RD PRIZE (500 EUR): OLOF PERSSON, PHD STUDENT AT LUND UNIVERSITY (SWEDEN):**

**MICROSCOPE TIP IMAGED WITH ANOTHER MICROSCOPE**

‘When trying to image surfaces and their atomic structure, an atomically sharp tip can be used to accomplish this. The final result of making these tips can be hard to evaluate since, if they are sharp enough, the tip will be invisible to an optical microscope. The sharpness of this tip cannot even be resolved with a scanning electron microscope. It is so sharp that it could easily puncture a bacterium.’



**CHRISTIANE BIRR, MAX PLANCK INSTITUTE FOR EUROPEAN LEGAL HISTORY (FRANKFURT AM MAIN): FOLIO**

'My field of work is the legal history of the 16th & 17th century. The first time I opened a book from this period, I was permanently hooked: there was a sensation of incredulity ('This is so old!') and elation ('But I'm holding it right here in my hands!'), of awe ('It's all in Latin!') and amazement ('But I can understand it!'). It is a sensual pleasure to handle those books and an intellectual one to enter into a discourse with their authors, bridging centuries with our questions and arguments.'

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**REGINA BLEUL, FEDERAL INSTITUTE FOR MATERIALS RESEARCH AND TESTING (BERLIN): SCIENCE FOR LIFE**

'Cancer is a terrible disease. It is frightening and incalculable and many people are still dying from it. Cancer cells are hard to fight, because you don't want to kill healthy tissue. Nanotechnology may be a chance to win the fight. Working in nanotechnology is fishing in the dark, not seeing what you are doing ... after months or even years of hard work getting such a (beautiful) image of what you actually did makes your success visible: Nanocarriers internalised by cancer cells.'

>

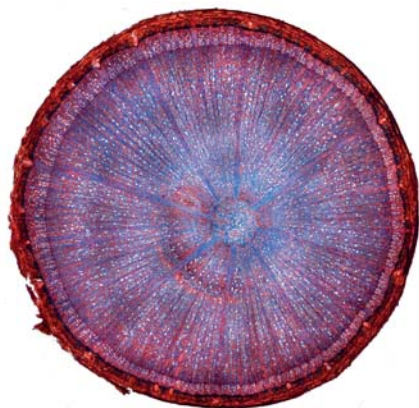


**THOMAS ENDELIN, UNIVERSITY OF GLASGOW (SCOTLAND): BIOMETICS OF FROG ADHESIVE TOE PADS**

'Tree frogs use adhesive pads at the end of each of their digits to climb smooth surfaces. The pad's surface is structured with individual cells, separated by channels, which not only resembles the tread of a car tyre but most likely serves the same purpose: to drain away excess water from the contact area, to allow for close contact with the surface. My research on the structure and function of frog pads may inspire the development of artificial adhesives which can stick to wet surfaces.'

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**MARTIN HALLINGER, UNIVERSITY OF GREIFSWALD: TRANSLUCENT TREE**

‘Thin cross-sections of tree or shrub wood reveal morphological structures like cell size and the borders of annual rings: The information obtained by measuring these characteristics can supply a large array of information about morphological and anatomical processes, wood formation and climatic influences on shrub or tree growth. For me, a picture like this shows the immense beauty of structures normally hidden from the human eye, sometimes resembling the colourful glass windows of churches.’

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**HERWIG HAUSER/ANDREAS MATT, MATHEMATISCHES FORSCHUNGS-  
INSTITUT OBERWOLFACH: THIS IS NOT A LEMON**

‘‘This is not a lemon’’ is the meeting point of the concrete visualisation of mathematical objects and the imagined reality. The equation defines all points in space that lie on the algebraic surface. The fascination of algebraic geometry is that equations become visual and formulas become forms. Our project IMAGINARY investigates how these connections can be used in interactive maths, maths education and maths communication. It is a new form of taking pictures: in the abstract world of mathematics.’

>



$$\text{Zitrus } x^2 + z^2 = y^3(1-y)^3$$



**PETER JAN MARGRY, ROYAL NETHERLANDS ACADEMY OF ARTS AND  
SCIENCES (AMSTERDAM): PURIFICATION**

‘For ethnologists fieldwork in religion is fascinating. It could be interviewing a young man who is dressed as a mediaeval Santiago pilgrim making an ‘‘esoteric’’ journey to arrive at sunset at the end of the world in Finisterre (Atlantic coast, Spain), or observing a friend and colleague who was prepared to undergo a risky ‘‘limpia’’ in order to find out how an illegal ritual cleansing is actually performed in the back of one of LA’s ‘‘Botánica’’ shops.’

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**VLADIMIR NIKOLAEVICH SIMONENKO, INSTITUTE OF CHEMICAL KINETICS  
AND COMBUSTION, NOVOSIBIRSK (RUSSIA): MYSTERIES OF COMBUSTION**

‘The photo shows the combustion moment of a model composition of a high-energy material which contains aluminium powder. The combustion process of different metals in high-energy materials provides a wide variety of beautiful pictures, fascinating for researchers as well as lay-persons. This particular picture was taken with a fast shutter speed in order to ‘‘freeze’’ the moment and to examine the processes of agglomeration, ignition and combustion of the metal. So my hobby has become very useful.’

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# THE LIMITS OF INDIVIDUAL FREEDOM

Should the community impose its will on the individual if public goods are under threat? The RG Ethics in Practice tried to find some answers

TEXT WOLFGANG GAISSMAIER AND FLORIAN STEGER

In order for people to live together, we need rules. Hardly anyone would deny that individual freedom of choice ends where others come to harm. But in an increasingly individualised society people cannot always reach a consensus on the degree of importance that should be ascribed to the respective type of harm.

This lack of consensus expresses itself particularly fiercely when religious and non-religious convictions collide, but also when individual use and the common good are at odds: Should vaccinations be mandatory? Should parents be allowed to decide whether they have their sons circumcised? Can people be compelled to live an environmentally-friendly life?

## Even experts make mistakes

In cases like these, how should a pluralistic society come to a wise compromise between individual freedom of choice and imposing a decision in the interest of the community – and how can academia help? Those were the issues discussed at an interdisciplinary workshop entitled ‘Is freedom of choice a threat to health and sustainability? Between necessary limits and paternalism’ held at the Wissenschaftsforum Berlin in June.

Run by the RG Ethics in Practice, the workshop attracted researchers in psychology, medical science and philosophy from Freiburg to Erfurt and Munich to Berlin, who then tackled the tensions between freedom, responsibility and dictation.

Initially, the psychology speakers argued that, despite all the wrong conclusions that may be drawn, it is possible and necessary to empower people to make well-informed decisions, because even experts make mistakes and may also have other interests and preferences.

However, individual freedom of choice starts to become a problem when it threatens public goods, such as protection against infectious diseases (in the case of vaccination decisions) or natural resources (in the case of environmental behaviour), which require individuals to subordinate their interests. Reconciling this with self-determination is an ethical challenge; academia can but provide information.

In their presentations, medical ethicists emphasised that in medicine, security of action usually only means legal certainty. But this just offers the normative framework the legislator considers possible, and it does not replace the ethical framework for action. In practice, the legal framework often proves to be interpretable and effectively leads to less security of action than it promises at first glance. It should certainly inform but cannot prescribe individual decisions. To this extent, the process of ethical assessment is a daily necessity in medicine.

## Ethical maps to navigate dissent

As the presentations from technology and applied ethics finally demonstrated, it is not to be expected that academic ethics will really be able to resolve conflicts. It is, however, central to elaborating the causes of conflict as well as alternatives. Just like a cartographer, ethics can draw up maps which show ways of reaching goals and finding alternative solutions. Ethics thus have a role to play in providing advice to society, in the public communication of social dissent.



*Pluralism and public goods: should individual freedom be curtailed for the common good?*

# PUPILS AS RISK RESEARCHERS

A *Junge Akademie* initiative helps a team in Leipzig to develop a hands-on approach to mathematics

TEXT ULRICH PONTES



László Székelyhidi ...



... and the young researchers ...



... attracted a big audience with their project.

Getting a taste of uni before leaving school, completing a short research project and, finally, presenting the results in a lecture theatre – this was an experience three pupils from Leipzig were able to have thanks to an initiative by the *Junge Akademie*. ‘Go for risk: a mathematical analysis of the game Risk’ was the title of the lecture the school team gave to an audience of about 100 during this year’s ‘University Open Day’ at Leipzig University.

In the run-up to the lecture, the students had four meetings with László Székelyhidi, a professor of mathematics at Leipzig University and a member of the *Junge Akademie*. During and between these meetings the project group worked on ‘Risk,’


the board game based on military domination of the world, trying to develop a mathematical approach and an optimal strategy. ‘The problem is by no means trivial,’ says Székelyhidi. ‘There is no elegant, easy answer, no definitive strategy.’ However, they were able to prove that the pupils’ intuition concurred fairly accurately with the probability analysis: depending on the starting point, it is advisable to attack the enemy immediately or to hold back and build up one’s armies at leisure.

To promote initiatives at the intersection of science and society is one of the goals of the *Junge Akademie* – the collaborative project in Leipzig is exemplary in demonstrating how this goal can become concrete. The story goes back to 2011

and another initiative launched by László Székelyhidi: ‘Junge Akademie macht Schule’ (figuratively: *Junge Akademie* sets a precedent) which brought together pupils from schools in various cities and members of the *Junge Akademie* for an interdisciplinary symposium on energy. Some academy members now agreed to continue the initiative and to organise small local research projects in their own disciplines with teams of pupils.

Only in Leipzig did the strategy develop as planned – in other places all that was achieved was a single visit to the respective institute by a school group. ‘The initial threshold level was very high,’ says László Székelyhidi. The teams had to submit a written application with CVs

and a project outline. ‘Pupils are not used to formulating a task for themselves which may not even have a solution.’ And of course they are worried about taking on too much, according to the professor. ‘Good marks are the be-all and end-all – the chance to get a taste of research is definitely seen as secondary.’ But even just informing pupils about the option in the first place proved to be much more difficult than he had thought. ‘Although we had no intention whatsoever of interfering in everyday schooling, and only wanted to provide a complementary opportunity, many schools responded along the lines of “leave us in peace,”’ Székelyhidi explains, visibly perplexed. By contrast, the two maths teachers who accompanied the Leipzig Risk Team to the first meeting were totally enthusiastic.

László Székelyhidi’s verdict is also positive: ‘I found it interesting. It was fun and hardly cost anything at all.’ And for the pupils – if they can manage to invest a bit more time – the Risk Project could become a presentable, long-term asset: according to Székelyhidi, they could even publish their findings in a specialist mathematical journal. 



# A VERY YOUNG ACADEMY

Looking abroad: The *Jonge Academie* in Belgium (Flanders) is planning its first projects, ranging from fundraising to science policy

TEXT SOPHIE DEJAEGHER



*The seat of the Royal Flemish Academy of Belgium for Science and the Arts*

The *Young Academy* of Belgium (Flanders) was officially inaugurated on 29 March 2013. It was founded just a few months earlier by the Royal Flemish Academy of Belgium for Science and the Arts and the Royal Academy of Dutch Language and Literature. It is, therefore, a “young” academy in many ways, but with a clear vision of where it wants to go and what it wants to accomplish.

‘We are a group of 40 academics who all did our Ph.D.s between three and ten years ago,’ says Jorgen D’Hondt, President of the *Jonge Academie*. ‘Several of us are postdocs, others have tenure track positions, and some are professors already. It is precisely this mix that gives us the necessary background for our academic mission: to improve the opportunities for young researchers at the very start of their careers and to organise projects and publications on all aspects of careers in academia, both for academics and non-academics.’

‘Since the inauguration, we have given presentations to several stakeholders in Flanders,’ explains the Spokesperson on Science Policy, Tina Kyndt, ‘and invited them back to tell us how they work and what information they might need. Watching them listening to us, taking notes on our suggestions, asking us to send them reports on what we discuss and conclude, is enormously encouraging, and exactly what we were hoping for.’

Apart from science policy, the *Jonge Academie* will also work on interdisciplinary research, a fashionable catchphrase which throws up many questions and which could be a crucial topic for debate amongst young academics. The Spokesperson on Interdisciplinary Research, Liesbet Geris, is embarking on the first project in this area.



### Professional communication training

‘It is extremely important that academics launch initiatives to communicate with a large audience of the general public, not least as an acknowledgement of the support we receive from the government,’ says Violet Soen, Spokesperson on Science Communication. ‘Giving our members the chance to get professional training in communications and writing is the first step towards future actions and publications. Every now and then, we shall take part in existing initiatives run by universities, national institutes, etc. but we will not stop reflecting on how these initiatives could be improved or what framework they might require.’

Apart from the goals mentioned above, the Young Academy of Belgium (Flanders) aims to pursue international objectives, too. Noel Salazar, Spokesperson on International Relations, updates the members on the issues that are being discussed in other countries and keeps track of what is happening in the field of mobility, open access and so on. Koen Brosens, himself a member of the Global Young Academy, makes sure the members are informed about what is discussed at the General Assembly and in the GYA Working Groups.

In addition to the Board, which is composed of the president and spokespersons of the working groups, there are a number of taskforces which deal with specific areas, such as the Statutes Taskforce and the Sponsorship Taskforce. As the *Jonge Academie* currently depends on annual sponsorship from the National Lottery, it is essential to try and acquire additional funding for future projects and administrative support. Nevertheless, all the members are full of hope and enthusiasm that they will be able to make an impact on academic life in general.



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## AWARDS, HONOURS AND FELLOWSHIPS

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### SYLVIA CREMER | GERMAN ZOOLOGICAL SOCIETY: WALTHER ARNDT AWARD

For her *habilitation* research on the social immune system of ants, Sylvia Cremer received the German Zoological Society's Walther Arndt Award worth EUR 5,000.

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### SVEN DIEDERICHS | HELLA BÜHLER PRIZE

This year's Hella Bühler Prize for outstanding scientific achievements in the field of cancer research went to Sven Diederichs. The prize money of EUR 100,000 will allow the biochemist to drive his research on the role of non-protein-coding RNA molecules in tumours of the lung, the liver and the breast at the German Cancer Research Centre and Heidelberg University Hospital.

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### TOBIAS ERB | GEBERT RÜF STIFTUNG: PILOT PROJECT

Tobias Erb submitted his project, 'Designing Novel Catalysts for CO<sub>2</sub>-Fixation,' with which he wants to pursue new approaches to biological CO<sub>2</sub>-fixing catalysts, to the Swiss Gebert Rüb Stiftung – and was successful. The proposal will receive CHF 205,000 to run as a pilot project over the next three years. The Foundation's research pilots promote particularly innovative and promising lighthouse projects.

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### WOLFGANG GAISSMAIER | RISING STARS

Every year, the 'Observer' magazine, published by the international Association for Psychological Science (APS), names particularly promising junior researchers who are expected to shape and impact their discipline as "rising stars" of psychology. Wolfgang Gaissmaier is one of this year's rising stars.

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### HERBORDT/MOHREN | STUTTGART DANCE AND THEATRE PRIZE

For *Das Stück* (Intervention), the artist duo Bernhard Herbordt and Melanie Mohren won the Stuttgart Dance and Theatre Prize, worth EUR 6,000, in the category Drama/Performance. The jury described the unusual performance in which members of the audience are drawn onto the stage as part of the action in the following terms: 'While we leaf through *Das Stück* und listen to the sounds, information and suggestions for action on our earphones, the millennia-old cultural phenomenon of "theatre" mysteriously gains momentum, disperses itself between and amongst all those present, in order, at the same time, as though foreshadowing once again, or perhaps for the very first time, to establish itself, to materialise, to join us.'

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#### HERBORDT/MOHREN | FONDS DARSTELLENDEN KÜNSTEN E. V.: CONCEPTUAL DESIGN GRANT

For the project cycle scheduled to run from 2013 to 2015, *Die Institution – Das Publikum – Das Theater* (The Institution – The Audience – The Theatre), the artist duo, currently based in Stuttgart, was awarded the highest Federal Government funding available – a three-year conceptual design grant of EUR 25,000 per annum.

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#### LISA KALTENEGGER | SIMONS FOUNDATION: COLLABORATION FUNDING

The astrophysicist Lisa Kaltenegger, who investigates the properties of exoplanets at Heidelberg and Harvard, was awarded funding of one million dollars under the Simons Collaboration on the Origins of Life programme.

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#### ANNA WIENHARD | SLOAN FELLOWSHIP

The Alfred P. Sloan Foundation grants fellowships of USD 50,000 to promising young researchers ‘in recognition of distinguished performance and a unique potential to make substantial contributions to their field’ in order to stimulate fundamental research. The mathematician, Anna Wienhard (Heidelberg), was one of the fellows selected in 2013.



# EVENTS 2013

- 
- 27 May **‘Performing Institutions #1’**  
Workshop discussion and panel discussion – with Herbor dt/Mohren and Pirkko Husemann, amongst others  
*Sophiensaale, Berlin*
- 
- 14 to 15 June **‘Is freedom of choice a threat to health and sustainability?’**  
Workshop run by RG Ethics in Practice – see report on p. 34  
*Wissenschaftsforum, Berlin*
- 
- 12 July **‘Performing Institutions #3’**  
Workshop discussion – with Herbor dt/Mohren and Emanuel Towfigh, amongst others  
*Stuttgart*
- 
- 2 to 25 July **3<sup>rd</sup> German-Russian Young Researchers Forum**  
*Bonn*
- 
- August **Speakers’ Corner: ‘Plus ça change? Old texts – new contexts’**  
Staged presentation of social history sources based on an idea by Marc Helbling, Katharina Heyden and Rebekka Voß  
*Frankfurt (15.8.), Berlin (17.8.), Göttingen (24.8.)*
- 
- 22 August **Exhibition launch: ‘The Berlin World Improvement Machine’**  
Curator: Friedrich von Borries. Exhibition from 23 August to 20 October  
*Hamburger Bahnhof, Berlin*
- 
- 20 to 22 September **Autumn plenary session**  
*Halle*
- 
- 9 to 13 October **‘The nature-culture border in art and science: historical development – interdisciplinary differences – current state of research’**  
Interdisciplinary conference run by RG Sound(worlds)  
*Saas-Fee (Switzerland)*
- 
- 7 to 9 November **Ideas workshop**  
*Schloss Goldschmieding, Castrop-Rauxel*
- 
- 18 to 19 November **‘Theories of popular culture’**  
Workshop run by RG Popular Culture(s)  
*Frankfurt*
-

# PUBLICATIONS 2013



**WISSENSCHAFT 2014**  
 EIN KALENDER DER AMBIVALENZEN  
 (*SCIENCE 2014*  
 A CALENDAR OF AMBIVALENCE)

Straight questions – straight answers? It is not quite as simple as that: academia is supposed to provide us with knowledge about the world but, in most cases, this knowledge is not clear-cut. If you want to describe it properly, you have to differentiate and accept the grey areas. ‘Are there races?’ – ‘What does “a dignified death” mean?’ – ‘Do we have to prove that  $1 + 1 = 2$ ?’ – ‘Are the Jews a nation?’ 50 researchers, members and alumni of the *Junge Akademie*, address these and many other questions, and explain why the answers have to remain ambivalent and open if they are going to be academic.

**Editors**

Klaus Oschema, Ulrike von Luxburg and Marc Helbling

**Publisher**

Jan Thorbecke Verlag  
*Ostfildern, 2013*



**PRAXISFELDER ANGEWANDTER ETHIK**  
 ETHISCHE ORIENTIERUNG IN MEDIZIN, POLITIK,  
 TECHNIK UND WIRTSCHAFT  
 (*IMPLEMENTING APPLIED ETHICS*  
 ETHICAL GUIDANCE IN MEDICINE, POLITICS,  
 TECHNOLOGY AND BUSINESS)

Morally correct behaviour needs more than just codified norms and general directives. It requires specific knowledge and special abilities. Applying general rules to complex situations – be they instructions on the therapies that should be avoided in clinical practice, or political decisions on the level of greenhouse gas reductions – requires specific knowledge and special abilities. This volume summarises the results of two workshops run by RG Ethics in Practice which sought to augment the different approaches used by the various ethics by applying a common moral, cognitive concept and thereby steering large areas of applied ethics closer to practice itself.

**Editors**

Florian Steger and  
 Rafaela Hillerbrand

**Publisher**

mentis Verlag  
*Münster, 2013*

# CATCHING UP WITH ... BETTINA BEER

There is a life after the *Junge Akademie* – which is why this space is reserved for alumni

**1. Is joy important for your work? Should it be?**

Definitely! But maybe you shouldn't expect to enjoy every bit of your work equally ...

**2. What do you enjoy about your work?**

Doing research in other countries, the results, and passing on my experiences.

**3. What is humankind's greatest achievement?**

The invention of writing.

**4. If you were to die tomorrow, what achievement would you look back on with most pride?**

Having survived certain committee meetings ...

**5. What aspects of your research are relevant for humankind?**

All of it.

**6. What advice would you give Ph.D. students?**

To nurture their curiosity and not be intimidated by the "schoolification" of doctorates.

**7. What advice would give professors?**

To nurture their curiosity and not be hamstrung by the "schoolification" of universities.

**8. What was humankind's greatest mistake?**

If humankind means the entire population of the world, then there aren't really any common mistakes. For most of them, only parts of humankind are responsible.

**9. What does the German academic system need?**

More openness to unexpected results.

**10. Should we abolish the universities?**

Certainly not. We should nurture them and not transform them into "schoolified" training centres.

**11. What has your career at uni and in research made of you?**



## ABOUT THE INTERVIEWEE

Bettina Beer is a Professor of Socio-Cultural Anthropology at the University of Lucerne, Switzerland. Her research focuses on the Philippines and Papua New Guinea and she is currently working on conflicts and social transformation in mining areas.

I see it the other way round: I've made my 'career at uni and in research.'

**12. What did the *Junge Akademie* make of you?**

The *Junge Akademie* showed me how much creativity is generated when you are free of strict target-setting and open to the unexpected.

**13. Do you have anything to add?**

I have far more questions than answers ...

**14. Any final words?**

... final words ...



## *JUNGE AKADEMIE MAGAZIN*

The *Junge Akademie Magazin* was conceived by members of the *Junge Akademie*. It provides insights into projects and events of the *Junge Akademie*, reports on members and publications, and intervenes in current academic and science policy debates.



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