

The Role of Science and the Humanities in Tackling Crises

New Year's Speech

by the President of the Deutsche Forschungsgemeinschaft (DFG)

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Check against delivery!



Dear Ministers, Senators, Secretaries of State,
dear Members of the German Bundestag,
Excellencies and Members of the Diplomatic Corps,
Presidents and Rectors,
Distinguished Guests,
dear Colleagues,
Ladies and Gentlemen,

It is such a pleasure for me to welcome you and celebrate this new year together with you. I sincerely hope that you had the opportunity to enjoy the festivities and the turn of the year with your family and friends. It is wonderful to meet again in person here in the beautiful Leibniz Hall of the Berlin-Brandenburg Academy of Sciences and Humanities. Such a festive gathering can by no means be taken for granted. Considering that, as winter draws to a close, another year of the war of aggression on Ukraine and already the fourth year of the pandemic commence.

1. Living in Times of Crises

The fact that we are standing here shows that we have made and are still making progress. The pandemic has largely given way to an endemic situation, despite the fact that the coronavirus is still circulating and that hospitals are again reaching the limits of their capacity for a

number of reasons. Intensive research and development work allowed for vaccines and medication that have eased the threat of COVID-19 to be created in record time. And we all learned how to live with the virus.

That is the good news. However, the pandemic has taken a great toll.

In addition to more than 650 million registered cases of COVID-19 worldwide and over 6.6 million people who lost their lives, there are the patients who could not be treated adequately during the pandemic. In addition, we see exhausted hospital staff, children, students and senior citizens who are worn out by the effects of isolation and illness, overworked parents and teachers, and entrepreneurs struggling for the survival of their businesses.

Last year, Russia's attack on Ukraine in violation of international law also forced its way into our lives, along with rapidly rising inflation, an increase of supply shortages and the current energy crisis. Another reason why we are feeling exhausted is that one crisis seamlessly transitioned into the next, and the boundaries between these crises are getting blurred.

I believe that it is important to pause at precisely this point, and to acknowledge and admit to this individual and societal exhaustion. Doing so is the only way to make the ground underfoot a little more palpable once again and to build upon what really is. I also think we would be well advised to treat each other with particular care and consideration in the months ahead.

2. Experience of Crises and Transformation

Against the background of this exhaustion we must, however, go beyond the question of what we actually perceive and experience as a crisis: we must also ask what it takes to tackle our present-day crises. Key aspects here include political foresight, societal cohesion, efficient structures and an understanding of relevant causes and effects. This is where science and the humanities come in at the very latest. They are, after all, clearly a societal force that is particularly familiar with ongoing and productive exploration of the unknown and of crisis-like phenomena.

How exactly can science and the humanities support a society find ways out of a crisis, though? I would like to explore this question now.

Let us begin by taking a look at the phenomenon of the crisis itself. The power of a crisis-like decisive development, of a dramatic, unavoidable change to our everyday lives, can be compared to the concept of *crisis* in medicine. Even in the ancient *Hippocratic Corpus* the term *crisis* is used to describe the peak and turning point in a disease process. This critical phase

is usually linked to a worsening of symptoms. The physical condition is becoming more precarious and approaches a turning point – the moment that will determine the further course of the disease and resolve the uncertainty about a chance of recovery.

Our coexistence has recently been characterised strongly by a similar experience of uncertainty, combined with the hope that things would get better and that we might even return to our former normal. The war and pandemic caused individual and collective dimensions of the crisis experience to merge. This is a phenomenon that may even reduce the strain experienced by an individual: life nowadays is certainly characterised for all of us by uncertainty paired with hopes for an end to the crisis.

This collective uncertainty also reveals and intensifies the tensions and centrifugal forces in our society, in a way that is similar to symptoms getting worse in a medical *crisis*. At the same time, a collective awareness of a shared contemporaneity is beginning to take shape. We cannot help feeling that we might currently be the witnesses and participants of a historic upheaval at this moment in time.

The historic signature of the crisis creates a bond that connects us beyond our individual experience. We live to see how fragile the promises of peace, freedom and prosperity of our democratic social order seem in the light of the current crises. And we comprehend uncertainty, worry and the fear of loss as a collective experience of crisis.

It is not unusual to experience crises as hard but frequently also helpful phases of transformation. Without, further development of the status quo can hardly be achieved. How diminished would biodiversity be and how uniform our environment if nature were concerned about its metamorphoses? Or think about the energy crisis, for example, that is virtually forcing us to vigorously strive for more sustainability and renewable energy. Our society has proven its ability to stand together by showing widespread solidarity with refugees from Ukraine or by efficiently saving energy. This is how our joint experience of crises is handing our society the key that we need to master these and other crises together with confidence, and to make use of their inherent opportunity for change.

When seen from this perspective, the catastrophic nature that we frequently assign to crises becomes far less powerful. Nevertheless, we cannot help feeling that there is no end of crises in sight right now – as though a crisis does not mark a change but is almost something constant and unalterable. This impression is quite mistaken, though: every crisis will come to an end – or it would not be a crisis – and there are things that we can do to improve the odds that we will come out safe and sound and strengthened on the other side.

3. The Role of Science and the Humanities in Tackling Crises

As a part of our society, science and the humanities are also affected by the crises. The current challenges have taken their toll on research and teaching, too. The German research landscape is bolstered up by courageous financing commitments of the Federal and Länder Governments, for example with regard to reducing the strain on research facilities in the energy crisis, the Pact for Research and Innovation, or by facilitating the second competition phase of the Excellence Strategy.

This enables researchers to continue supporting society in tackling the crises with cutting-edge research results and in-depth knowledge: for example, in order to address climate change through consistently sustainable action.

By researching crisis phenomena, science and the humanities put us in a position to understand them and the related pressure for change as more than fateful upheaval. The crisis itself is assigned epistemological value from a cross-disciplinary point of view. Making a crisis scientifically usable also changes our relationship to the crisis: those affected become actors, and passiveness is replaced with awareness of an opportunity to develop and redesign.

Research, which always generates new knowledge and thus ensures progress and prosperity, does not merely grow in a crisis. Instead, it also subjects the current status of knowledge itself to a very critical scrutiny and the pressure to change based on new insights. It is this crisis-trained power of judgement of science and the humanities that is now in greater demand than ever before.

In view of climate change, the pandemic and the war, the term crisis seems to exist only in the plural these days. The synchronous occurrence of multiple, interconnected crises highlights how hard it can be to detect the finite and temporary nature of a single crisis. Crises on this scale cause various developments to culminate in a chain reaction, whose geographic and temporal dynamics are very difficult to identify, forecast or even contain in advance.

In a complex, poly-critical situation like this, the individual crises are also rather likely to accelerate and intensify each other. A differentiated understanding of these complex, locally and globally interconnected dynamics can only be achieved based on outstanding expertise, multidisciplinary analyses and interdisciplinary cooperation.

This means that science and the humanities can provide crisis expertise. They possess the necessary sensitivity and instruments for identifying, exploring and classifying the complex, dynamic and often imperceptible interdependencies of multiple crises. New, resilient knowledge is created through questioning, research and debate. In this context, science and the humanities are not only addressing uncertainty and concern. Most of all, they are providing

us with the tools needed for developing tailor-made solution approaches and drawing conclusions that inform our actions – not only, but also, for mastering acute crises.

This crisis expertise extends far beyond the acute phase. In its follow-up work – in the epicrisis you might say – researchers will then seek to process the experience and to classify it in a profound manner. It is precisely because we cannot foresee now what awaits us beyond the horizon and which findings will be useful for tackling future crises that science and the humanities are among the safest investments for our future.

This competence of science and the humanities flourishes best in spaces of trust in which the researchers' curiosity about fundamental questions is inspired and their thirst for knowledge is not subdued by the need to serve immediate application purposes. Framework conditions that promote research and innovation are essential here, which allow for balancing risks and opportunities and facilitate research, for example, through state regulation, and give rise to enabling spaces.

Basic research, in particular, needs freedom to allow for the plurality of scientific disciplines, methods and perspectives to unfold. By funding excellent cutting-edge research, we lay the foundations for true scientific breakthroughs and fill the knowledge reservoirs that enable us to efficiently address the crises of the future, too.

Research and academic discourse thus create the basis for innovation while still remaining open-minded when it comes to producing new insights. Self-reflection and continuous course correction combined with a thirst for knowledge and open-mindedness are at the heart of how researchers see themselves. These work ethics are not an abstract asset but an internalised quality – a bearing that usually unites the thirst for knowledge of researchers and social responsibility in a very natural manner.

4. Closing Words

This means that science and the humanities do in fact enable us to master crises. Based on many years of experience in researching complex phenomena, they can pave the way out of a crisis. Along the way, they have evidence-based expert advice from various perspectives to offer to society, politics and the business sphere. In addition, they highlight possible solutions and therefore contribute to increasing societal resilience. This is exactly why it is worthwhile to continue to promote excellent research and to invest in innovation and training, especially in a time of crises as we are experiencing right now.

After all, we can look with confidence to the year ahead. Together with all of you, the Deutsche Forschungsgemeinschaft will continue to address current and future crises in its specific role within the German research system, to help find research-based ways out of our present-day crises and to thus contribute actively to shaping the future of our society.

Thank you for your attention!