Where do we come from? Where are we? Where are we going?

President’s speech at the 92nd Annual Meeting of the German Society of Otorhinolaryngology, Head and Neck Surgery on the occasion of its centennial

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Dear fellow congress president, dear Andreas,
dear honorary presidents, dear Hans-Peter,
dear Heinz Maier,
dear members of the executive board of the German Society of Otorhinolaryngology, Head and Neck Surgery,
dear Ellen Lundershausen, vice president of the German Medical Association,
dear Dirk Heinrich, chairman of the German Professional Association of ENT Surgeons, Spectabilis,
dear Professor Gekle,
dear Professor Meller, and
dear colleagues on your screens at home and from wherever you have dialed in:

This month the German Society of Otorhinolaryngology, Head and Neck Surgery (DGHNO-KHC) celebrates a special anniversary. Therefore, I would like to address the questions, “Where do we come from?“

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I would like to preface my remarks with a disclaimer. The American philosopher and writer Ralph Waldo Emerson (1803–1882) noted that we should be aware that our best ideas usually come from others (“Our best thoughts come from others”).

And so, it already begins with the title, chosen in reference to the preface of the main work, The Principle of Hope, by the philosopher Ernst Bloch (1885–1977), which he wrote in exile in the United States, and which begins with the words: “Who are we? Where do we come from? Where are we going? What are we waiting for? What awaits us?” [4]. Ernst Bloch is considered a neo-Marxist philosopher—and before questions arise here—I am not a Marxist. The history of Ernst Bloch is interesting because he was called from the United States to the socialist German Democratic Republic (1949–1990) to the chair of philosophy at the (Karl Marx [at that time]) University of Leipzig. However, because he taught his humanist ideas of freedom, e.g., in connection with the Hungarian revolution and the East German uprising of 1953, he was “retired” from the university in 1957 for political reasons and he then emigrated to the Federal Republic of Germany and moved to Tübingen.

There are many quotes that represent why it is important to deal with the past. George Santayana (1863–1952) wrote in The Life of Reason in 1905, “Those who cannot remember the past are condemned to repeat it” [38]. And Professor Volker
The four phases of the history of otorhinolaryngology

1. The accumulation and progress of dispersed knowledge by the mid-19th century

2. The establishment of the first subspecialties of otology, laryngology, and rhinology beginning in the mid-19th century, including their academization: first lectures, specialty consultations and polyclinics, hospitals, associate and later full professorships, journals, books, professional societies, professional congresses, key inventions, and more

3. The establishment of otorhinolaryngology as a unified specialty in the late 19th and early 20th centuries

4. The consolidation and further development of otolaryngology with the corresponding recognition of the specialty and its classification in the obligatory subject canon of university teaching, pioneering developments with—from Germany’s point of view—influence on and export to neighboring academic subjects in the 20th century and increasing internationalization

About 150 years ago, in the 1860s, Salomon Moos (1831–1895) in Heidelberg, Hermann Schwartze (1837–1910) in Halle (Saale), and Friedrich Voltolini (1819–1889) in Breslau were the first associate professors in our field. It is interesting to note that Moos had first habilitated in internal medicine. Voltolini became associate professor of otology and laryngology in 1868 and may thus be considered the first academic representative of the entire field of otorhinolaryngology in Germany (Fig. 4).

In 1884, the Königliche Universitäts-Ohrenklinik (Royal University Ear Hospital) was built in Halle (Saale), the first hospital building in Germany specifically for the inpatient treatment of diseases in our field (Fig. 5).

In 1899, the first university clinic for the entire specialty (otorhinolaryngology) in Germany was opened in Rostock, and Otto Körner was appointed as its director in 1901, becoming the first full professor for the entire specialty of ear, nose, and throat medicine (ENT) in Germany (Fig. 6).

Thus, it has been a long road to the complete academization and establishment of our specialty at universities. For this reason, as well, we should be very critical of the current practices observed at some universities of filling ENT clinic directorships with non-tenured professors, part-time professors, or academic directors outside the field of otorhinolaryngology, head and neck surgery.

May 2021 marked a special date for the German Society of Otorhinolaryngology, Head and Neck Surgery. Exactly 100 years earlier, at its first annual meeting on May 12–14th, 1921, in the city library in the Wespenest (Wasp’s Nest) in Nuremberg, the legal predecessor of our scientific society, the Gesellschaft Deutscher Hals-, Nasen-, und Ohrenärzte (Society of German Otolaryngologists), was formed by the merger of the Deutsche Otologische Gesellschaft.
Journals: The Archiv für Ohrenheilkunde was renamed Archiv für Ohren-, Nasen-, und Kehlkopfheilkunde (Archive of Oto-Rhino-Laryngology) in 1915 and still continues today as the European Archives of Oto-Rhino-Laryngology and Head & Neck and as the journal HNO (ENT), which was first published as a supplement [42].

Dear Andreas, I would like to thank you very much for the really good cooperation in this very special year of the COVID-19 pandemic. We have resolved to do this every 100 years and to submit a corresponding resolution to the executive board. ;-)
women forced to have abortions. Thus, ENT specialists were directly involved in the implementation of Nazi racial ideology and bore a substantial share of the responsibility for the suffering of those affected after 1933 [41, 47, 48].

In today’s award ceremonies of our scientific professional society, it is usually said “… shall primarily honor the personality and emphasize the exemplary function of the awardee …”. In 1993, at the 64th annual meeting of our professional society in Münster, the former full professor in Münster, Karl Mündnich, was awarded the honor of the Gold Medal of Merit of the DGHNO-KHC. During the time of National Socialism, Mündnich was Obersturmbannführer of the Leibstandarte Adolf Hitler, a hand-picked troop, who certainly cannot be characterized as harmless followers [23, 24].

During my research, I was also irritated by the fact that in the 1950s, both in the then-Federal Republic of Germany and in the socialist German Democratic Republic, eyes were obviously firmly closed to the Nazi past in some cases. Woldemar Tonndorf, for example, congratulated Oscar Wagener from Göttingen in an obituary, retrospectively as it were, for a “Jew-free ENT clinic” (“... Wagener had always rejected with sure instinct every employee whose racial affiliation was in the slightest doubt—he had no self-reproaches to make in 1933 ...”; translated from German: [44]). In 1951, Tonndorf was appointed as full professor of otorhinolaryngology at the (Karl Marx) University in Leipzig—only a few years before Ernst Bloch (you remember the beginning of this lecture!) lost his
teaching license in Leipzig because of free speech.

It is certainly not surprising that in dictatorships, proximity to the state leadership promotes careers; however, we must also think of those whose development as scientists and clinicians was prevented or worse during these times.

Examples include Josef Cohen (1873–1955), chief physician in Cologne, who was removed from office in 1933 ([27]; Fig. 9), and Felix Blumenfeld (1864–1947) from Wiesbaden, founding editor in 1909 and then editor for many years of the Zeitschrift für Laryngologie, Rhinologie, und ihre Grenzgebiete (Journal of Laryngology, Rhinology, and Their Border Specialties)—later Laryngeo-Rhino-Otologie—until his editorship was withdrawn by the National Socialists in 1934 ([39, 42]; Fig. 10).

Although numerous institutions and professional societies in Germany have already addressed their role during National Socialism and have actively reappraised or reprocessed it, there is still a need for action here for our professional society. Therefore, the executive board of the DGHNO-KHC has decided to have the history of German otolaryngology before, during, and after the time of National Socialism scientifically analyzed and reviewed [36].

More about the history can be found in the current issue of the journal HNO (ENT) [33], with articles on the German history of otolaryngology up to the foundation of our professional society in 1921 and further from 1921 onward [28, 29], the history of German-language ENT journals [42], and the international networking of our society [32]. I would also like to refer to numerous publications by Harald Feldmann on the history of otolaryngology (e.g., [9–12]) and to the overview article by Karl Heinz Vosteen on the “Development of Otorhinolaryngology in the 19th Century,” which appeared in 1996 in the anniversary volume on the academic teaching institutions and teachers in otolaryngology [46], as well as to the published commemorative lecture of Konrad Fleischer on the occasion of the 75th anniversary of the foundation of the society in 1996 [13].

A supplement will be the book, Geschichte der akademischen Lehrstätten, Lehrer und Lehrerinnen und Kliniken

Fig. 5 a The first hospital building in Germany specifically for the inpatient treatment of patients in our field in 1884: the Königliche Universitäts-Ohrenklinik (Royal University Ear Hospital) in Halle (Saale). a Construction drawing [8], with permission © University Archives of Martin Luther University Halle-Wittenberg, UAHW, Rep. 8, Folder 91, all rights reserved. b Current view of the former men’s ward of the former ear hospital; today, among other things, the dean’s office of the medical faculty. Photo: S. Plontke 2011

Fig. 6 a First clinic (1899) and first full professorship (1901) for the entire specialty of otolaryngology in Rostock by Otto Körner. a Otto Körner (1858–1935). With permission © Clinic and Polyclinic for Otorhinolaryngology, Head and Neck Surgery “Otto Körner,” Rostock University Medical Center, all rights reserved. b The “Grand Ducal University Hospital for Ear, Nose and Throat Patients.” From [52], Rostock University Library. c The Otto Körner Clinic today. With permission © R. A. Mlynski, all rights reserved
Fig. 7 ▲ Foundation of the Gesellschaft Deutscher Hals-, Nasen-, und Ohrenärzte (Society of German Otorhinolaryngologists) in 1921 (see text for details)

Fig. 8 ▲ Entrance page of the first complete online annual meeting of the German Society of Otorhinolaryngology, Head and Neck Surgery. With permission © German Society of Otorhinolaryngology, Head and Neck Surgery, all rights reserved. Prepared by VRtual X GmbH (Hamburg, Germany) in collaboration with COCS GmbH (Munich, Germany)
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ENT hospitals ([1]; found in the chapters on the respective ginnings to the year 2021 can also be otolaryngology from its institutional be-

20 years. Many developments in German non-university ENT hospitals in the last 25 years and that of will update the history of university ENT hospitals in the last because it already indicates transec-

tion" (translated from German).

That leads me to the second part of my presidential address and the question:

“Where are we?”

Here, a small selection of medical advances in otolaryngology are mentioned first ([Table 2]).

The second question, “Where are we?,” is the focus of our anniversary congress, which, in addition to some historical aspects with the lectures, symposia, roundtable discussions, and “Oxford-style” debates, as well as the involvement of industry partners, is dedicated to the main scientific topics of “Quality in Medicine” (as the topic of the 2020 annual meeting, which was canceled because of the COVID 19 pandemic) and “Rare Diseases in Otorhinolaryngology” [35].

However, answering the question, “Where are we?,” also involves looking beyond our own borders, and here we must note that there are significant differences in access to healthcare around the world [3, 5, 21].

Moreover, global malnutrition currently leads to more disease and death than do violence, use of drugs, alcohol and tobacco, and unprotected sex combined [49]. Of the 56 million deaths worldwide in 2012, a total of 620,000 (about 1%) were caused by violence (including 120,000 from war and 500,000 from crime), 800,000 from suicide, and about 1.5 million from diabetes. One could also summarize it as, “sugar is now more dangerous than gunpowder” (quoted from [17]).

This leads into the third part of my speech, and thus the third question:

“Where are we going?”

Stephen Hawking (1942–2018) in his posthumously published book Brief Answers to the Big Questions [18] summarized the really big questions we should be asking ourselves ([Table 3]).

As a scientific society, we are likely to deal with very few of these issues.

Specifically, however, we face challenges in the following areas in the coming years ([Table 4]):

Even 100 years after the foundation of our professional society, we are committed to the unity of the field of otolaryngology, head and neck surgery. Nevertheless, the breadth of the specialty, the multitude of (rare) diseases, the rapid medical–technical progress, the economic framework conditions with simultaneous quality demands in diagnostics and therapy, as well as the surgical expertise inherently required in a surgical specialty and based on surgical experience and “practice” result in the necessity of specialization even within our specialty. Future medical care structures must accommodate a broad provision of basic outpatient and inpatient ENT specialty care in all regions in Germany, as well as specialized, technical, interdisciplinary, and interprofessional care at centers. This specialization is also necessary to enable protection...
Fig. 11 More on the history of German otorhinolaryngology also can be found in the book edited on the occasion of the 100th anniversary year of the foundation of our professional society, *Geschichte der akademischen Lehrstätten, Lehrer und Lehrerinnen und Kliniken der Hals-Nasen-Ohren-Heilkunde, Kopf- und Hals-Chirurgie in Deutschland* (History of Academic Teaching Institutions, Teachers and Hospitals of Otorhinolaryngology, Head and Neck Surgery in Germany). It will unite its two predecessors published in 1996 and 2001 into one volume and update the history of the university ENT hospitals in the last 25 years and that of the non-university ENT hospitals in the last 20 years [1].

Fig. 12 Surgical opening of the mastoid process with chisels. **a** Mastoid chisels according to Schwartzte. From Dench’s Textbook, 1896 [7]. **b** Schematic drawing of the opening of the mastoid process from the original publication by Schwartzte and Eysell in 1873 [40].

Specialty ENT training must meet the high demands of the very broad yet very specialized knowledge in our specialty. It must not be minimized and must be based on solid financing models—in the inpatient as well as in the outpatient areas. I believe that extensive or even complete specialty training (“residency”) in otorhinolaryngology in purely outpatient care structures is the wrong way to go. Experience in the field of ophthalmology in Germany has already shown us the
consequences of this undesirable development. If further training is outsourced from the large hospital training centers to private ENT practices, then this reduces the training experience of generations of trainees. That cannot be good for the patients who need our help, and, last but not least, we ourselves may be patients later on.

Closely related to the necessary specialization within our field is preclinical and clinical research. In this context, it is important to address current problems in research and research funding. A high proportion of biomedical studies have methodological deficiencies, most commonly poor experimental design ("underpowered"), inappropriate or poor statistics, selective reporting of data, and publication bias toward positive results. Often the study design is not at all adequate to answer a particular question. John Ioannidis of Stanford University even came to the conclusion in 2005 that "most published research findings are false" and too many results are not reproducible [20]. Science and science funding have become too much of a business, with the evaluation of scientific success being problematic. As a false incentive, quantity (e.g., amount of funding and numbers of publications) has developed instead of quality and creativity.

The funding of a small number of universities under the German government's Excellence Initiative "[...] contents with a classic organizational problem. The incentive structure of the initiative is often interpreted as rewarding primarily the quantity of scientific output. Quality falls by the wayside. [...] The number of publications per professorship has increased at all German universities, at non-excellence universities even more than at excellence universities. But over the same period, the average number of citations per publication fell—and particularly sharply in the group of universities of excellence [...]" (translated from: [19]).

The question of the importance of the size of universities and research groups is also controversial and must be viewed in a differentiated manner. A group of researchers from Chicago and Evanston in Illinois evaluated 65 million articles, patents, and software products that span the period 1954–2014. They demonstrated "that across this period, smaller teams have tended to disrupt science and technology with new ideas and opportunities, whereas larger teams have tended to develop existing ones." The group concluded that "both small and large teams are essential to a flourishing ecology of science and technology," and suggested that "to achieve this, science policies should aim to support a diversity of team sizes" (cited from [50]). This is especially important because "the German Research Foundation systematically favors the larger institutions. [...] Oligarchization in the university landscape, however, fails to exploit scientific potential" (cited from: [15]). Just like individual hospitals, research groups and research associations can lose their "resonance frequency" once they reach a certain size.

With The German Study Centre for Otorhinolaryngology, Head and Neck Surgery (DSZ-HNO), an important step has been taken toward strengthening evidence-based medicine in ENT and the clinical study culture in our field. However, economic pressure, among other things, hinders the promotion of young scientific and medical talent at universities. As a professional society, we must actively counteract de-academization, promote clinician scientists, and counteract the orienta-
Compensation is not setting and that they are also adequately compensated [6]. This development is not limited to inpatient conditions but also affects outpatient conditions to the same qualitative level. Complex operations are performed under these conditions.

We will have to ensure that technically complex operations are performed under outpatient conditions to the same qualitative level. These are the promises. A closer look, however, reveals disillusionment. Of the usual three dimensions of technology assessment—namely, benefit, risk, and cost—the last two are ignored as much as possible, and the assessment is reduced to a promise of benefit, which is usually completely exaggerated. Most important, even with the greatest faith in technology, the impact on humanity cannot be overlooked (translated from [2]).

Digitization, artificial intelligence, and big data are being touted as a concept that puts us on the threshold of precision medicine that will soon diagnose and treat without error. With the right technical upgrades to master the vast amounts of data, the end of chance and thus error-free medicine are already waiting on the horizon. These are the promises.

To the question, “Are patients a means to an end or an end in themselves?” a look at history again gives a clear answer. In Kant’s “self-purpose formula,” the prohibition of instrumentalization of other people and thus of patients is anchored: “Act in such a way that you treat humanity, whether in your own person or in the person of any other, never merely as a means to an end, but always at the same time as an end” ([22]; Fig. 13).

Our efforts—absolutely also at the political level—must be directed against the waste of resources through increasing bureaucratization, inappropriate economization, and the expansion of false incentives.

In this context, close cooperation with physicians from other specialties and within our field between the scientific society and the German Professional Association of ENT Surgeons (BV-HNO) is absolutely essential, despite different convictions or diverging interests in some aspects and factual issues.

An economic course of action is also important in healthcare. But we must decide: Do we want a healthcare system or a healthcare market? Is healthcare a matter of public interest or should it be regulated by the market? If we think that the market will take care of it, then we must realize that the market serves itself first and foremost. The state, however, has a responsibility for the lives and health of its citizens. State-guaranteed revenues from a system financed on the basis of solidarity should not be a source for lucrative profit objectives. In the ENT field, we must create a nationwide existential care for the population at a high level, including by realizing different levels of care, instead of directing patients through “advertising,” “portal practices,” or similar with the purpose of maximizing profits. We must also question our own role as “employees” in the system: Are we “free health professionals” or simple “vicarious agents” for the generation of profits for stock corporations, foreign pension funds, or other financially strong outside investors [16, 26, 30, 37, 45]?

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We must maintain or regain the medical responsibility for the care process to a large extent, so that in the end—completely in the Kantian sense—the human being always remains the purpose of our actions.

Thank you for lending me your ears!

Stefan K. Plontke
2020/2021 President of the German Society of Otorhinolaryngology, Head and Neck Surgery

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Declarations
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