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Moderniser without a Nazi past: life and work of DGZMK president Rudolf Naujoks (1919–2004)

Introduction: For many dentists, the name Rudolf Naujoks stands for top-class basic research and professional-political commitment. The present article takes this positive but general image as an opportunity to highlight Naujoks' concrete influence on the development of dentistry; a further focus is on his relationship to National Socialism.

Material and methods: The methodological basis of the study are files from the Hamburg State Archive. In addition, research was conducted at the Berlin Federal Archives. The scientific publications of Naujoks and the secondary literature available on his person were evaluated as further sources.

Results: Naujoks was one of the most sustainable modernizers of German dentistry in the second half of the century. During his term of office as president of the German Society for Dental and Oral Medicine (DGZMK), the "Akademie Praxis und Wissenschaft" (Academy Practice and Science, APW, 1974) and various working groups were established, which significantly promoted the further development of the DGZMK and beyond. His scientific achievements included innovative research on caries prophylaxis and fluoridation. There were no indications of a political connection to National Socialism.

Discussion and conclusion: Compared to his predecessors, Naujoks had specific characteristics and approaches: These relate to his educational path, his understanding of dentistry, his research approach, his publication practice, his vision with regard to the DGZMK and his political orientation. These characteristics show that Naujoks initiated a far-reaching paradigm shift both within the DGZMK and within university dentistry.

Keywords: APW; cariology; DGZMK; fluoridation; National Socialism

Introduction

Although Rudolf Naujoks already became emeritus in 1987 and passed away in 2004, he still has the reputation of a distinguished and basic research-oriented scientist known beyond the borders of Germany. He acted as chairman of several national and international organisations – including the dental lecturers' association (1967–1969) and the DGZMK (1972–1977). It was in these offices that he provided essential scientific and professional impulses.

This article examines Naujoks' life and his contributions to the development of German dentistry and the DGZMK. The focus is on the questions of Naujoks' self-image as a university teacher, on possible unique features of his actions and on his concrete significance for the further development of university dentistry. Further attention is paid to Naujoks' relationship to National Socialism during the Third Reich.

Material and methods

The source material for the study consists of files from the Hamburg State Archives. Research was also conducted in the Federal Archives in Berlin. The academic papers published by Naujoks served as further sources. In addition, a comprehensive evaluation of the secondary literature available to date on his person and on the history of the Würzburg Dental Clinic was carried out. In particular, laudations, obituaries and lexical contributions, but also individual journal articles were consulted.

Results and discussion

1. From Königsberg to Würzburg: The stations of Rudolf Naujoks' life

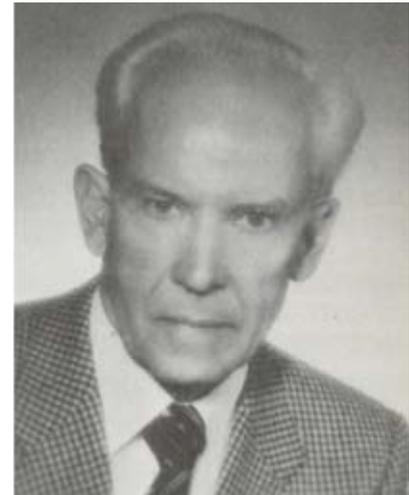
Rudolf Karl Naujoks was born on July 24, 1919 in Königsberg (today: Kaliningrad) in East Prussia [5, 7, 26–28, 33, 34, 47, 49, 52, 53]; see Fig. 1 [2]). His parents were Karl Naujoks, a city employee at the Königsberg horticultural office, and Berta Naujoks, née Klotzki.

Rudolf Naujoks attended the "Burgschule" (castle school) – a secondary school in Königsberg. There

he obtained his general qualification for university entrance on March 2, 1938. He initially completed work and military service and was deployed in the field after the outbreak of the Second World War, where he took part in battles in the West, East and South (Italy). In the winter semester of 1941/42 he enrolled to study dentistry at the University of Königsberg, but soon had to suspend his studies due to the war.

Before the end of the war, he married Christa Heinrich in 1944. The couple had two children together. They first settled in Bargteheide (Holstein), just 30 km north of Hamburg. It was not until the winter semester of 1945/46 that Naujoks was able to resume his studies in dentistry – now at the University of Hamburg. In 1948 he passed the dental examination and obtained his licence to practise dentistry. He then became an assistant at the Dental Clinic of the University of Hamburg to the maxillofacial surgeon Karl Schuchardt (1901–1985) [11]. The dissertation was supervised by Schuchardt and was entitled "Ueber Zaehne und Tonsillen bei der fokalen Infektion" (On teeth and tonsils in focal infections) [35].

In 1949, Naujoks became a member of a working group on "Caries and Sugar Degradation in the Saliva of the Mouth" (translation by DG), which also included the nutritional researcher and cariologist Fritz Bramstedt (1911–1976). In July 1955, Naujoks then obtained his habilitation in dentistry under Schuchardt in Hamburg with the study "Histotopochemische Untersuchungen am Zahnorgan" (Histotopochemical Investigations on the Dental Organ) [36]. This was followed by his appointment as a private lecturer. In 1958, Naujoks was appointed senior physician and, moreover, head of the "Abteilung für zusammenfassende Behandlung von Zahn-, Mund- und Kieferkrankheiten" (Department for the Comprehensive Treatment of Dental, Oral and Maxillofacial Diseases) at the Hamburg University Dental Clinic. The next step in his career was his appointment as associate professor in 1961.



Courtesy of Deutscher Ärzteverlag

Figure 1 Naujoks, Rudolf [2]

From March to May 1962, Naujoks worked as a visiting professor at the Harvard School of Dental Medicine in Boston. The following year he was appointed to the chair of dentistry at the University of Würzburg [26, 27, 33, 34]. The background to the announcement was the sudden cardiac death of Hans Schlamp (1900–1962) in July 1962, which made it necessary to fill the Würzburg chair. With that professorship, Naujoks also took over the direction of the Würzburg University Clinic and Polyclinic for Dental, Oral and Maxillofacial Diseases. He also acted as head of the conservative, prosthetic and orthodontic departments. Only maxillofacial surgery was in the hands of a second full professor: also in 1963, the respective position was filled by the maxillofacial surgeon Friedrich Schröder (1912–1996).

Naujoks saw his main professional focus in dental conservation and therefore initiated the spin-off of dental prosthodontics in 1972 – with the appointment of his former student Wilhelm Kühl (*1929) – and the spin-off of orthodontics in 1974 – with the appointment of Emil Witt (*1934) from Freiburg [27, 41].

Until his retirement in 1987, Naujoks served as clinic director and head of the Department for Restorative Dentistry in Würzburg [26, 27, 33, 34]. But even after his retirement he remained professionally active. For example, he coordinated a study

Term of office	Name	NSDAP Membership	Life data
1906–1926	Otto Walkhoff	+	1860–1934
1926–1928	Wilhelm Herrenknecht	+	1865–1941
1928–45, 1949–54	Hermann Euler	+	1878–1961
1954–1957	Hermann Wolf	+	1889–1978
1957–1965	Ewald Harndt	+	1901–1996
1965–1969	Gerhard Steinhardt	+	1904–1995
1969–1971	Eugen Fröhlich	+	1910–1971
1972–1977	Rudolf Naujoks	–	1919–2004
1977–1981	Werner Ketterl	+	1925–2010

Table 1 The presidents of the CVDZ (from 1933: DGZMK) who experienced the Third Reich as adults and their party-political orientation

on the oral health status and oral health behaviour in Germany until 1991 [40].

Rudolf Naujoks died on March 27, 2004 in Würzburg. His second wife – Jutta Naujoks, née Patz, born in 1928 – survived him by nine years. She was also a dentist and, after her habilitation (1974), worked from 1978 to 1987 as associate professor and senior physician for dental preservation at Naujoks' chair [27].

2. Naujoks' scientific and professional significance and his political classification

In the second half of the century, Rudolf Naujoks was one of the most influential and visible German-speaking university teachers of dentistry and held a large number of representative offices, which can only be mentioned here in extracts [5, 7, 26–28, 33, 34, 47, 49, 52]. For example, he served as Dean (1965/1966) of the Würzburg Medical Faculty, as President of the “Continental European Division” of the “International Association for Dental Research” (CED-IADR, 1965), as President of the “European Organisation for Caries Research” (ORCA, 1967/1968, [3]) and as Chairman of the German “Zahnärztliche Dozen-

tenvereinigung” (Dental Lecturers Association) (1967–1969). He was also the initiator of the permanent “Konferenz der Lehrer für Zahnerhaltung und Parodontologie” (Conference of Teachers of Dental Preservation and Periodontology).

Of all the offices held, Naujoks' work as president of the DGZMK (1972–1977) deserves special attention [7, 23] (cf. Tab. 1). He not only “administered” the office during this time, but also endeavoured to reorient the professional society in terms of content. To this end, in 1974 he issued a four-page “programmatic statement” in the “Deutsche Zahnärztliche Zeitschrift” (DZZ) entitled “Die Deutsche Gesellschaft für Zahn-, Mund- und Kieferheilkunde. Gestern – Heute – Morgen” (The German Society for Dental, Oral and Maxillofacial Medicine. Yesterday – Today – Tomorrow) [37] (cf. Fig. 2). In this article, Naujoks first reflected on the past and present of the professional society and then commented on its future orientation. In his opinion, the future DGZMK had tasks to fulfil “on three levels”: (1) dealing with clinical-scientific issues “which are of current importance for the practice of dentistry and which, for example, require a profes-

sional, expert-scientific basis in negotiations with the statutory health insurance funds”, (2) the “promotion of developing new special sciences” by establishing corresponding working groups and (3) “post-academic education”. With regard to the latter task, “systematically structured series of courses [...] usually on weekends [...] should convey the new findings of the last five to seven years in the fields of knowledge relevant to modern dental practice” [37]. During his time as a member of the board of the DGZMK (1967–1969) and especially in his position as president (1972–1977), Naujoks initiated the foundation of several working groups and associations. These included the “Working Group for Basic Research” (1967), the “Working Group for Paediatric Dentistry and Prophylaxis” (1973) and the “Working Group for Work Science and Dentistry” (1973). The same applies to the working groups “Epidemiology and Public Health” (1976) and “Forensic Odonto-Stomatology” (1976) [23]. However, as DGZMK president, Naujoks had the reputation of taking up the cause of founding such organisations even when the actual initiative came from other people. Römer noted, for example, that Naujoks had rejected a written application to establish a “Society for Paediatric Dentistry within the DGZMK”, citing formal reasons. According to Römer, “with this tactic, which is popular in dental professional meetings – rejecting a motion and replacing it with his own ‘more far-reaching’, but in principle comparable motion – Naujoks opened up the possibility of taking the initiative [...]” [50]. Nevertheless, it remains to be noted that Naujoks clearly promoted the establishment of these AKs and AGs. The founding of the “Akademie Praxis und Wissenschaft” (APW) also took place during Naujoks' term of office (1974). It was constituted as a subsidiary of the DGZMK with the goal formulated by Naujoks of making structured further education accessible to the dental profession. The APW subsequently developed into a particularly great and lasting success. Today, it is impossible to imagine structured con-

tinuing education in dentistry without it.

Naujoks' visionary activities as DGZMK president were recognised as such at an early stage. For example, the dental professional politician and chronicler Karlheinz Kimmel (1925–2013) stated in 1977 in an almost prophetic manner: "Under the presidency of the nationally and internationally equally well-known and recognised Würzburg university teacher, Rudolf Naujoks, with his unmistakable (East) Prussian nature, the 'German' [DGZMK] has developed into a great scientific institution of our discipline [...]" [55]. The foundation of the APW and the various working groups under the umbrella of the DGZMK were groundbreaking; this can be considered certain today, viewed from the distance of half a century. The aforementioned organisations gave the professional society a modern, future-oriented character.

Naujoks' role as a researcher was just as important as his role as a professional politician. With his fundamental papers on caries prophylaxis and fluoridation, on the biochemistry, aetiology, diagnostics and therapy of caries, on the histochemistry of the dental organ as well as through biochemical saliva and plaque examinations, he attracted great scientific attention [1, 4, 29–32, 38–40, 42–44]. In some cases, these were joint studies with the already mentioned Fritz Bramstedt and with Adolf Kröncke (1922–2009), but he also regularly collaborated with foreign authors. Kröncke, like Bramstedt, was one of Naujoks' Hamburg companions and later also became a full professor at a Franconian university (Erlangen, 1964).

Naujoks also succeeded in acquiring high-ranking research funds. For example, he played a leading role in establishing the "DFG Special Research Area" (Sonderforschungsbereich der Deutschen Forschungsgemeinschaft) named "Biology of the Oral Cavity" (1971), which was based at the University of Würzburg – a rare success in contemporary university dentistry, and one that was accordingly much acclaimed. In the 1960s and 70s, Naujoks also conducted research on caries epidemiology and

oral health with various industrial cooperation partners [45–46]. Even in retirement he remained active as a researcher. He appeared in public with a total of over 150 publications.

Naujoks, who took over the direction of the Würzburg Dental Clinic in 1964 and in the first years also headed the three departments of restorative dentistry, prosthodontics and orthodontics, assigned himself professionally to dental conservation (and periodontology). He saw no point in retaining responsibility for all the above-mentioned areas in his hands; instead, he endeavoured to relinquish parts of his management functions and thus also his sphere of influence. Accordingly, he undertook a "systematic further subdivision of dentistry and oral medicine" by establishing independent chairs [41]. First, he initiated the establishment of a "Chair for Experimental Dentistry" in Würzburg in 1964/65 – unique in Germany at the time. In addition, he played a decisive role in filling the aforementioned professorship with his Hamburg companion Fritz Bramstedt, who was eight years his senior. This was followed in 1972 by the spin-off of dental prosthodontics and in 1974 by the independence of orthodontics [41]. Naujoks was one of the first full professors to relinquish personal influence and decision-making power in order to promote specialisation – similar to Eugen Fröhlich (1910–1971) from Tübingen, his immediate predecessor in the office of DGZMK president, who died prematurely [20].

While Naujoks did not consider the clinic his personal "power base", he fought vehemently for a systematic expansion of the dental clinic as such. In the end, he was able to obtain construction funds amounting to 85 million DM for reconstruction and expansion measures. However, he did not live to see the final result of the hurdle-laden and protracted renovation measures and extensions of the dental clinic during his term of office as clinic director, because the latter ultimately lasted beyond the turn of the millennium [56].

Naujoks was held in high esteem among the specialists in university dentistry. Peter Riethe (1921–2020)

even described him as a "'special type' of homo sapiens" who had developed to "ideal perfection and completeness"; he attributed to Naujoks in particular the qualities of "powers of observation, memory, intelligence and imagination" [49].

Naujoks was very well connected, to which his many offices at home and abroad contributed significantly. In addition to the aforementioned Bramstedt and Kröncke, his long-standing research partners and companions in the German-speaking world included Günther Ahrens (1926–1999) and Hans Mühlemann (1917–1997), whom he succeeded as president of the CED-IADR (Continental European Division of the International Association for Dental Research) in 1965. Naujoks' best-known academic students – apart from the two above-mentioned collaborators Jutta Naujoks, née Patz, and Wilhelm Kühl – were Wolfgang Büttner (1926–1981, 1967 move from Gießen to Würzburg and habilitation recognition), Hans-Dietrich Mierau (1930–2019), Wolfgang Wiedemann (*1944) and Johannes Einwag (*1954) [22].

Naujoks' professional reputation and extensive networking were reflected in numerous honours and awards in the second half of his professional life: in 1973, for example, he received the pin of honour of the "Deutsche Zahnärzteschaft" (German Dental Association). In 1975 he was made a Fellow of the "American College of Dentists", in 1976 he received honorary membership of the "Österreichische Gesellschaft für Zahn-, Mund- und Kieferheilkunde" (Austrian Society for Dental, Oral and Maxillofacial Medicine), and in 1977 he was elected a member of the National Academy Leopoldina. In 1978 he was awarded the Honorary Pin of the DGZMK, in 1979 he received the "Award of Merit" of the Fédération Dentaire Internationale (FDI) and the bronze medal of the "Ordre National des Chirurgiens Dentistes" (National Order of Dental Surgeons) in France. In 1983, he was awarded the Golden Badge of Honour of the German Dental Association and in 1984, honorary membership of the German Society for Dental Conser-

vation (DGZ). In 1986, he became an honorary member of the DGZMK.

Unlike his predecessors in office, Naujoks started his post-war career without a political mortgage. The research on a possible political involvement in National Socialism ended with a clear result: there were no indications of membership in the NSDAP or of National Socialist statements or activities [25].

Conclusions

Prima vista, Naujoks seems to share basic characteristics with many of his predecessors in office: He was a respected representative of his field and achieved high visibility in his office as president.

And yet, a closer look reveals a whole series of unique personal features. They not only identify Naujoks as a special type of university lecturer, but also prove that he stands for a paradigm shift within the DGZMK as well as within university dentistry. Indicators for this assumption are (1) Naujoks' educational path, (2) his understanding of dentistry as a subject, (3) his research approach, (4) his publication practice, (5) his vision with regard to the DGZMK and (6) his political orientation.

The first indicator of a paradigm shift is provided by Naujoks' educational background: he was the first DGZMK president since Otto Walkhoff, appointed in 1906 [9, 15, 16], who was not at the same time a doctor, but only licensed as a dentist. All other predecessors – Wilhelm Herrenknecht (1926–1928) [17], Hermann Euler (1928–1945, 1949–1954) [10, 14, 24], Hermann Wolf (1954–1957) [18], Ewald Harndt (1957–1965) [13] and Gerhard Steinhardt [19] (1965–1969), but also his immediate successor Werner Ketterl (1925–2010) [21] – were doubly trained and licensed. Naujoks thus stands prototypically for a new era and a new generation of university teachers of dentistry – university teachers who were able to qualify academically at the medical faculties as pure dentists and, moreover, specialised in a sub-area within dentistry. In fact, until well into the second half of the century, the



Figure 2 Rudolf Naujoks' policy paper on the development of the DGZMK [37]

medical faculties that were decisive for appointments in dentistry and were run by physicians preferred double-appointed candidates – even when it was not a question of chairs with a focus on maxillofacial surgery. This was obviously also due to the fact that dentistry did not have the Abitur (A level) as a study requirement before 1909 and the right to award doctorates in the subject before 1919 [6, 12, 23, 51]. It eventually took even longer to be perceived and accepted by the majority of faculty members as an academic subject of equal standing.

gener Weise erfolgt. Hier sei lediglich auf zwei große Zeitabschnitte mit ihren für die Entwicklung unserer DGZMK besonders bedeutenden Einflüssen hingewiesen. Dabei betrifft die erste Spanne den Zeitraum bis etwa zum 2. Weltkrieg.

Die ersten Jahrzehnte in der Geschichte der DGZMK waren geprägt durch jene Bemühungen, die in der damaligen Zeit in fast allen wissenschaftlichen Disziplinen zu beobachten waren, nämlich durch das Suchen nach Wegen zum Austausch von Erfahrung und Wissen. Es war endgültig jener Zeitabschnitt beendet, in dem erlerntes und erarbeitetes, durch Erfahrung oder Intuition gewonnenes Wissen ängstlich gehütet wurde. Die Kommunikation auf wissenschaftlicher Ebene wurde auf eine immer breitere Basis gestellt.

Damals verstand sich die Deutsche Gesellschaft für Zahn-, Mund- und Kieferheilkunde vor allem als „wandernde Schule der zahnärztlichen Praxis“. Während der 50. Jahrestagung im Jahre 1911 in Dresden – von heute aus gesehen also nach der halben Distanz – wurde der Beschluß gefaßt, für praktizierende Zahnärzte Demonstrationen und Fortbildungskurse über aktuelle Fragen aus der Praxis durchzuführen. Teilnahmeberechtigt sollten nur Mitglieder der Gesellschaft sein. Die Einrichtung wurde zu einer Dauerinstitution. Hierauf wird noch zurückzukommen sein. – Die Förderung der wissenschaftlichen Zahn-, Mund- und Kieferheilkunde wurde daneben aber nicht vergessen.

Zu den Aufgaben der Deutschen Gesellschaft für Zahn-, Mund- und Kieferheilkunde gehörte in jener Zeit aber noch ein weiterer Aspekt. Sie hatte in nicht unbeträchtlichem Ausmaß auch die standespolitischen Interessen der Deutschen Zahnärzteschaft wahrzunehmen. Es ist sicher-

cordingly did not claim to lead all sub-areas of dentistry in his role as clinic director. Rather, he saw himself as a specialist within dentistry and accordingly promoted its differentiation into individual sub-areas with independent chairs (“departmental structure”). It is evident that Naujoks’ “modern” position on this issue carried weight among university dental teachers, for after all, Naujoks was also chairman of the dental lecturers’ association, as well as initiator of the permanent “Conference of Teachers of Dental Maintenance and Periodontology” and, indeed, for many years president of the DGZMK – by far the most important German professional society. Naujoks thus acted as a role model on this issue (together with Eugen Fröhlich, who died at an early age). He was, so to speak, the antithesis of older colleagues who saw themselves as doctors and generalists in the field of dentistry and often combined this holistic self-image with the claim to retain decision-making power over all the departments of “their” clinic. A prototypical representative of this traditional view was Herman Euler (1878–1961) as clinic director in Breslau [10, 14, 24]. However, this attitude was most pointedly stressed by the double-appointed full professor Matthäus Reinmöller (1886–1977), who headed the Rostock University Dental Clinic until 1955. He emphasised, for example, that every future university lecturer in dentistry had to be a doctor at the same time and that dental clinics needed a hierarchical structure with a superior head. Reinmöller also established four specialist departments in Rostock in the post-war period but ensured that these were led by senior doctors who were “subordinate” to him. For him, it was constitutive that “all departments were looked after by a single directorate” and not that “each department represented, or wanted to represent, its own clinic” [55]. Naujoks thus represented the modern counter-model to this increasingly anachronistic understanding of university dentistry.

A third indicator of change is provided by Naujoks’ research approach: he gave significantly more weight to

basic research than his (mostly clinically oriented) predecessors in the presidency. Although Naujoks also worked on individual clinical-practical issues, he clearly drew his professional reputation from his fundamental histological and biochemical studies, which also made him compatible with modern transdisciplinary bioscientific research at an early stage.

This corresponded with a fourth characteristic of Naujoks: his publication practice. Naujoks published far more than earlier presidents of the DGZMK or other former professors of dentistry together with other authors. Until then single authorships had predominated. In addition, his publications were more internationally oriented than those of previous presidents – both in terms of the publication organs chosen and the co-authors involved. Moreover, Naujoks clearly preferred the journal article as a form of publication over book contributions or the traditional monograph. While many former presidents of the DGZMK, such as Willoughby D. Miller (1853–1907) [8], Walkhoff (1860–1934) [9, 15, 16], Euler (1878–1961) [10, 14, 24], Harndt (1901–1996) [13] and most recently Fröhlich (1910–1971) [48], remained in the collective memory of several generations of students precisely because of their successful textbooks, Naujoks broke with the tradition of classic book authors.

Naujoks was also out of the ordinary with his vision for the DGZMK: Like no other president before him, he pushed the promotion of the “special sciences” and the further “differentiation” of the DGZMK – by founding working groups and associations and by establishing the subsidiary organisation APW. Even though Naujoks had important comrades-in-arms in these initiatives, he was ultimately the “enabler” and essential motor of this reorientation – thus helping the DGZMK to gain more attractiveness and a new self-image.

Finally, the research on Naujoks’ political orientation in the Third Reich also led to a personal peculiarity: Naujoks was the only one among a total of nine presidents in the peri-

od under consideration from 1906 to 1981 who did not join the NSDAP in the Third Reich and who maintained party-political neutrality in the years until 1945. This fact can only be explained to a limited extent by his late year of birth (1919); after all, even among the dental university professors born after 1919 there are still NSDAP members, such as his successor Ketterl. Naujoks’ behaviour is more likely to have been rooted in a personality trait: namely, not following contemporary trends or orienting himself towards the established, but first and foremost pursuing his own convictions and intuitions.

Conflicts of interest

The author declares that there is no conflict of interest within the meaning of the guidelines of the International Committee of Medical Journal Editors.

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