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- Increasing interest among dentists in dental history.
- Encouraging dental schools to develop historical collections on dentistry, and to offer adequate instruction in dental history.
- Developing a broader understanding of the facts of dental history among the leaders in dentistry in order to aid them in their attempts in solving important problems in dental education and practice.
- Stimulating more thorough and comprehensive research in dental history, thereby extending the boundaries of dental knowledge, giving substantial support to growing professional culture.
- Creating an authoritative body to which important questions relating to dental history could be referred for factual verification.

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The Telltale Teeth: Psychodontia to Sociodontia

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Author's Introduction

Why does a scholar of modern literature write about teeth? I hasten to assure the readers of the Journal of the History of Dentistry that, unlike the Danish fairy-tale writer Hans Christian Andersen, I have not been plagued by lifelong toothache nor, like the German novelist Günter Grass, have I suffered from a prognathous jaw. My relationship to my teeth and my dentists has been pleasantly benign. My interest is purely literary and cultural.

For many years much of my research has been devoted to the themes and motifs that have fascinated writers through the ages and, in addition, provide insight into our own society. One of my earliest articles (1961), for instance, dealt with “The Mystic Carbuncle,” that stone that was believed, from antiquity through the Middle Ages, to glow in the dark and to symbolize Christ, and whose legend, now secularized, continued to captivate writers down to Nathaniel Hawthorne, Oscar Wilde, and Hermann Hesse. In “The Caninization of Literature” I wondered why the figure of talking dogs has showed up in writings from classical Greece down to Franz Kafka and other modern authors—not to mention Snoopy in a popular comic strip. My most recent book, Gilgamesh Among Us (2012), asks why the hero of that ancient epic has, in the late twentieth and early twenty-first century, continued to generate almost a hundred novels, plays, operas, paintings—not to mention video games and TV programs.

“The Telltale Teeth” emerged from this focus. My interest was initially triggered by Günter Grass’s novel Local Anaesthetic (1969), which amounts to a veritable hymn to dentistry: its history, its application, its social implications. As it happened, I was engaged at the time in writing my book Fictional Transfigurations of Jesus (1972), and two of the major works involved also happened to use decaying teeth as a social symbol: Arthur Koestler’s Darkness at Noon and Graham Greene’s The Power and the Glory. Meanwhile, the Introduction to European Short Fiction course that I taught every spring at Princeton University involved several other works in which teeth played a role. The more I thought about the topic, the more examples I recalled from my previous reading: for instance, Thomas Mann,

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who was obsessed with the symbolism of teeth from his early novel Buddenbrooks (1901), whose dentally-deficient hero dies following a visit to his dentist, down to his Doctor Faustus (1947), which uses the image of “the dead tooth” and “root treatment” to designate cultural and aesthetic forms that have outlived their time but are resurrected for parodic purposes.

By that time I had a list long enough to encourage me that the topic deserved further scrutiny. It also happens that all three of my children had their wisdom teeth removed during the early 1970s; so dentistry was very much on the collective family mind. Moreover, the American public was increasingly, it seems, exposed daily and hourly by television to the glittering dentures of ads, newsreaders, and actors. Accordingly I began a serious study of the history of dentistry and of images associated with dentistry in art and human culture and, at the same time, to wonder what this obsession with teeth could tell us about our own society. My conclusions involved, as the subtitle indicates, a shift from teeth as an index of the individual psyche to dental health as a symptom of social well-being. It was therefore a combination of factors—personal, literary, theoretical, historical, and critical—that prompted me to write “The Telltale Teeth” as well as almost all my other works.

When the article was first published (in the journal of the American Modern Language Association) it got a gratifying response, and several odontophiles wrote to alert me to other examples—principally in American literature. I was able to incorporate those suggestions into the expanded version of the article that I published as a chapter in my book Varieties of Literary Thematics (1983) and that I hope a new audience will enjoy as much as the earlier ones did.

that his teachers invariably divert any discussion of present evil to reminiscences about their past. His real reason for forsaking the protest action, we learn, is so that he may not also be obsessed, when he is forty years old, by the memory of a single memorable incident from his youth.

Now this largely allegorical action has little to do with dentistry. But Grass has come up with a unique narrative device. Starusch suffers from a prognathous lower jaw, and during the weeks of Scherbaum’s indecision he is undergoing a long and involved treatment for the condition. Most of the story gets told in the form of conversations that Starusch invents between himself and his dentist. It is never absolutely clear how much of the dialogue actually takes place and how much is merely imagined. Most of the time no talk is possible since Starusch’s mouth is filled with aspirators, cotton swabs, casts, and the fingers of the dentist’s assistant. We must even assume that many of the telephone conversations between Starusch and his dentist, in the weeks between the treatments of the upper and the lower jaws, are simply a product of his imagination.

To complicate the situation even more, the dentist has a television set in his office. As Starusch watches the set, his imagination is stimulated by the blank screen, the ads, the news reports, and the shows—e.g., reruns of “Lassie” or cooking lessons—to think about his own past, which becomes weirdly blended with the events on the television screen. As a result, even though during most of the novel Starusch is sitting immobile in the dentist’s automated chair, undergoing painful operations and unable to utter a word, we obtain a great deal of information about his life and fantasies as well as the affairs of his student, Philipp Scherbaum.

In the course of all this we also learn much about the history, theory, and practice of dentistry. First, we get a detailed and graphic description of the cleaning of Starusch’s teeth as well as the measures undertaken for the adjustment of his prognathous bite. (The novel also turns out to be a catalog of dental technology with rhapsodies on saliva ejectors, air-turbine drills, ultrasonic scalers, and Water Piks.) Second, the book contains a thumbnail sketch of the history of dentistry. It begins with a threefold invocation of St. Apollonia, the patron saint of dentists and those who suffer from toothache, since as a part of her martyrdom in third-century Alexandria her teeth were torn out. We hear about dental practices among the Romans as well as the brutal methods of extraction before the invention of anesthetics. There are speculations, finally, about the possible effects of toothache in world history. Could it be, we are asked, that Nero set fire to Rome simply because he was suffering from a severe toothache? (p. 76, p. 217).

All this might be considered irrelevant and even distracting were it not for the fact that Grass develops the odontological material into a consistent image for society as a whole. Starusch, whose prognathous bite suggests a certain brutality and who now submits to a treatment that will give him normal human articulation, is not merely an individual; this teacher of German literature and history represents an entire generation of Germans trying to come to terms with past illness and present moral discomfort. “I regard pain as an instrument of knowledge,” he concedes (p. 175). The dentist to whose treatment he submits remains nameless and faceless—we know him only from the tennis shoes he wears—because he represents the anonymous and impersonal social engineer of the modern welfare state that promises to cure all ills through technology. The dentist has developed a veritable philosophy of odontology. He gives lectures at a local community college on tooth decay, which he abhors with moral fervor as “a by-product of civilization” (p. 134). Tartar is explained psychologically as “calcified hate” (p. 31) and capitalism is likened politically to the tartar on the teeth of society (p. 139). As a rationalist, the dentist is opposed to drastic revolutionary acts and advocates preventive measures instead, in dentistry as well as politics. When Starusch outlines his plan for dissuading Scherbaum, the dentist gives him some sober practical advice, “as though speaking of a root treatment” (p. 132). Politics, the dentist argues, must be put on the rational basis of science and preventive medicine. “In contrast to politics, modern medicine can point to achievements which show conclusively that progress is possible if we confine ourselves strictly and exclusively to
the findings of natural science and the results of empirical research.” (p. 179)

In the course of his treatment Starusch permits himself to succumb for a time to this vision of an “age of prophylaxis” (p. 188), in which preventive measures will be taken against every evil. He dreams of a society in which religions and ideologies will disappear because “the question of being is answered...by hygiene and enlightenment” (p. 188). And yet, as Starusch realizes by the end of the book, any such sanitized society must inevitably fail because it involves too many compromises of the sort that Scherbaum is forced to make. The local anesthetic upon which dentistry and the welfare state pride themselves diverts our attention from causes to symptoms. It eases the pain for a time, but it does not do away with the problem. Whenever aggressive impulses—like the war in Vietnam—burst out they are momentarily stilled or, in the idiom of the novel, locally anesthetized. But the anesthetic never lasts. In the last paragraph we learn that a new infection has undermined Starusch’s bridgework. The bland solutions of social engineering cannot eradicate the deep pains of existence.

Grass’s dentist exposes his feelings long enough at one point to complain that there are so few dentists in literature, even in comedies. (The only exceptions, he notes, are certain spy stories in which microfilm is hidden in bridgework.) He believes that dentists are condemned to secondary roles because their work has become too painless and inconspicuous to be interesting. “Local anesthesia prevents us from being weirdies” (p. 124). But if Grass’s orthodontist had put aside his professional journals long enough to keep up with contemporary literature, he would have known that an entire fictional branch of the American Dental Association could be established by the dentists who people American novels of the sixties alone. The forerunner of all these contemporary literary dentists is of course the hulking, slow-witted hero of Frank Norris’s naturalistic novel *McTeague* (1899), who operates a Dental Parlor in San Francisco even though he has no training or degree but only a shelf-full of books. Norris describes dental procedures in careful realistic detail, cribbing many passages directly from Thomas Fillebrown’s *A Text-book of Operative Dentistry*. But McTeague himself is concerned not with teeth so much as with gold. This *idée fixe* is stated on the first page of the novel, when we hear of McTeague’s ambition to have “a huge gilded tooth, a molar with enormous prongs, something gorgeous and attractive” to advertise his office. And it continues to the end when, forced to abandon dentistry to work in the gold mines, he notes in the drills and bits “a queer counterpart of his old-time dental machines” (Ch. 20). The narrator-hero of Saul Bellow’s *Henderson the Rain King* (1959), in contrast, is as much obsessed with his teeth as is Grass’s Starusch, although for the American the aching in his gums is not a symptom of conscience, but a sensation that accompanies the experience of beauty. After he breaks his acrylic bridge on a hard biscuit, he devotes the better part of a chapter (Ch. 10) to an account of his dental history. Henderson speaks at length of Doctor Spohr, the New York dentist who made the bridge he has just broken. But more colorful by far is his first dentist in Paris, a woman endowed with such a large bust that she smothered her patients as she worked and who objected to American dentistry “on artistic grounds.” When Henderson sits down in her chair, “she starts to stifle me as she extracts the nerve from a tooth in order to anchor the bridge. And while fitting the same she puts a stick in my mouth and says, ‘Grincez! Grincez les dents! Fâchez-vous.’ And so I grince and fâche for all I’m worth and eat the wood. She grinds her own teeth to show me how.” Whereas these two dentists occupy only one vivid chapter in Bellow’s novel, a colleague of theirs plays one of the major roles in John Updike’s *Couples* (1968). Freddy Thorne, a competent dentist “obsessed with decay,” is an insecure man who uses his bedside collection of pornography and his lewd conversation to conceal his inadequacies. When Freddy helps Piet Hanema to arrange an abortion for his mistress (a “little pelvic orthodonture,” as he calls it), he demands in return a night in bed with Piet’s wife—and turns out to be impotent.

Norris’s *McTeague*, Bellow’s *Mlle. Montecuccoli*, and Updike’s *Freddy Thorne*, though memorable as characters, are not true philosophers.
of odontology in comparison with such figures as Dudley Eigenvalue, D.D.S., in Thomas Pynchon’s V (1963). Eigenvalue, whose Park Avenue office houses a museum of dental history, propounds a theory that he calls “psychodontia” just as psychoanalysis once usurped the role of father-confessor from the priesthood, now “the analyst in his turn was about to be deposed by, of all people, the dentist” (Ch. 7). According to Eigenvalue’s theory, the soft pulp of the tooth is the warm pulsing id that is protected and sheltered by the “enamel” of the superego; neurosis is equated with “malocclusion”; and so forth. Whereas Pynchon’s psychodontist regards teeth as a clue to the patient’s emotional state, other fictional dentists practice what might more fittingly be called sociodontia. Consider the Reverend Doctor Lionel Jason David Jones, D.D.S. and D.D., in Kurt Vonnegut’s Mother Night (1966), a bigot and racial agitator who has a “political interpretation of teeth” according to which “the teeth of Jews and Negroes proved beyond question that both groups were degenerate” (Ch. 13). As his investigations proceed, he even begins “to detect the proof of degeneracy in the teeth of Catholics and Unitarians.”

But it is not enough merely to establish the presence of these dentists—psychodontists and sociodontists alike—who drill away in contemporary German and American fiction. In order to appreciate these philosophers of decay, who assign psychological and political significance to tartar and caries who gaze into their patients’ mouths as raptly as a soothsayer into a crystal ball, we need to consider the history of human attitudes toward teeth.

II.

When teeth occur in cultural contexts, as opposed to specifically odontological ones, they tend to be characterized by one of three attributes: potency, beauty, or pain. In myth and folklore, teeth have long symbolized sexual vigor as well as wisdom. In Greek mythology Cadmus brought forth a race of warriors by sowing upon a plain the teeth of a dragon he had slain, a motif exploited by C. L. Sulzberger in his political satire The Tooth Merchant (1973), in which an Armenian agent stumbles upon the still-potent dragon’s teeth and tries to sell the troops to Stalin, Roosevelt and other leaders of contemporary world powers. In the age of Chaucer, to have a “coltes tooth” was a proverbial expression implying youthful sexual vigor (Reeve’s Tale, Wife of Bath’s Prologue). In Egyptian iconography the god Horus is often depicted with his thumb in his mouth during moments of deliberation; and according to Celtic legend, Fionn places his thumb under his tooth whenever he requires magical guidance.

Because of their symbolic potency it is imperative to guard against the loss of teeth. In the Old Testament one of the most terrible curses involves the appeal to God to break the teeth of the enemy (Job iv:10; Psalms iii:7; Psalms lviii:6). Sir James Frazer tells of African tribes in which the king cannot be crowned if he is symbolically emasculated by having a broken tooth; and in another tribe the ruler is put to death if he loses a tooth. Because of the virtue inherent in teeth, they must not be allowed to fall into the hands of one’s enemies; extracted teeth should be buried or hidden, a superstition still evident in the practice of mothers who carefully save their children’s baby teeth. Another popular belief has it that teeth should be salted and burned in order to keep them away from witches. Of course, the sexual implications of teeth are familiar to Freud, who interprets the pulling of teeth in dreams as castration. By the same token, when Anse Bundred finally acquires his false teeth at the end of William Faulkner’s As I Lay Dying (1930), the spiritual boost “made him look a foot taller,” giving him the confidence he needs to acquire a new wife.

For these reasons, teeth make potent charms and relics. At Kandy, in Ceylon, a tooth of the Buddha is preserved in the Temple of the Holy Tooth; in The Song of Roland (St. 173) the hero has a tooth of St. Peter set in the pommel of his sword Durendel; and when Robert Guiscard laid siege to Salerno in 1076, he demanded as part of the surrender terms the tooth of St. Matthew that was owned by the ruler of the city. Among many peoples, a tooth set as a jewel is considered a good-luck charm of considerable virtue, a superstition still
evident in the lodge emblem worn by members of the Order of Elks. In F. Scott Fitzgerald’s *The Great Gatsby* (1925), the gangster Meyer Wolfsheim wears cuff-links made of “the finest specimens of human molars” (Ch. 4). The view of teeth as a symbol of potency is preserved, finally, in language, which in its metaphors constitutes a vast repository of ancient beliefs. Thus, if something sets our teeth on edge or if someone casts an insult in our teeth, we can gnash our teeth in anger, show our teeth belligerently, grit our teeth resolutely, take the bit in our teeth, arm ourselves to the teeth, then fight tooth and nail in the teeth of great danger and, with luck, escape by the skin of our teeth.

The attribution of magical significance to teeth helps to account for the ancient practice of dental ablation, which has been observed in skulls dating from the Neolithic period in many parts of the world. In some societies one or two incisors are removed during the rites of passage as a test of manhood or to provide an exit through which evil spirits may escape from the body. On the Sandwich Islands, young men sacrificed their front teeth to the gods, and among certain tribes of southwest China girls had two of their incisors knocked out on their wedding day to mark them as married women. In Japan, through the nineteenth century, married women resorted to a less violent surrogate: they stained their teeth with a solution of urine, iron, and saki to achieve the black gleam (resembling a gap in the teeth) that distinguished them from unmarried maidens. Although most of these practices—including filing, notching, and staining of the teeth—originated as religious rituals with sexual connotations, the magical origins were gradually lost sight of, and mutilated or darkened teeth came to be regarded as a mark of beauty, as in Japanese geisha culture. To cite a contemporary example, the inlaying of teeth with precious stones among Central American Indian tribes originally had religious meaning; but when two stars of the Baltimore Bullets basketball team had diamond stars embedded in their teeth, they were presumably motivated by purely decorative impulses.

These oddities of dental lore are worth noting for at least two reasons. First, they provide dramatic evidence for the shift from the superstitious view of teeth to the cosmetic view: many modern beliefs concerning teeth have their origin in religious or cultic practices. Second, they suggest the extent to which the current Western ideal of shining white teeth is culturally determined since in some societies mutilated or darkened teeth are considered *comme il faut*.

The Old Testament mentions teeth with notable frequency, so often that dental historians cite it as evidence for the surmise that the Hebrews, in contrast to the Egyptians, were blessed with unusually sound teeth. Yet most of the biblical references to teeth betray that the Hebrews are still close to the superstitious view. Virtually all the teeth occur in contexts involving potency (e.g., the teeth of the enemy that are to be shattered) or in such pronouncedly sexual contexts as the Song of Solomon (iv:2 and vi:6) “Thy teeth are like a flock of sheep that are even shorn, which came up from the washing.”

But teeth do not belong to the standard canon of attributes—such as hair, eyes, cheeks, lips—normally cited in classical and medieval literature. The reasons seem fairly obvious. In the first place, the grinning face that is considered socially *de rigueur* in the mid-twentieth century is a product of our image-conscious culture. The Romans had a highly developed art of dentistry, as we know from a variety of texts ranging from Pliny’s *Natural History* to Martial’s epigrams, and they set great store by healthy teeth. Yet it was not consistent with Roman *gravitas* to expose the teeth in smiles. Thus Catullus (*Carmina*, no. xxxix, ll. 1-7) pokes fun at a young man named Egnatius, who was so vain of his perfect white teeth that he went around with a huge grin on his face, like a Hollywood matinee idol:

*Egnatius, quod candidos habet dentes, Renidet usquequaque... quicquid est, ubicumquequest, Quodcumque agit, renidet.*

[“Egnatius, because he has bright white teeth, always smiles... Whatever it is, wherever he is, whatever he is doing, he grins.”]

*The Telltale Teeth: Psychodontia to Sociodontia*
To take an example of a different kind: among the 330 illustrations in John Pope-Hennessy’s magisterial study *The Portrait in the Renaissance*, fewer than ten show even the slightest glint of teeth; and not a single face displays a toothy smile. By contrast, in the 1970-71 picture book of the Princeton University faculty, well over a hundred of the 660 photographs reveal teeth, most of them in full glittering grins.

In the second place, given the precarious state of dental hygiene during what Henry James once called the “undentisted ages,” an otherwise beautiful girl might display far less than flattering teeth if she opened her lovely lips. As a result, in medieval literature we hear much more about toothaches than about pearly teeth. Fredegard of St. Riquier (fl. 825) composed twenty-four Latin hexameters to tell how the song of a thrush charmed away his toothache; Heinrich Kaufringer relates a *märe* in which a young wife uses toothache as an excuse to meet her lover; and the *Roman de la Rose* (ll. 1075-76) draws on the popular lapidaries of the period for its allusion to a magical stone that cures toothache. To be sure, lovely teeth are cited from time to time. In his work *On Christian Doctrine* (*De Doctrina Christiana*, Bk. II, Ch. vi), Augustine interprets the quoted passage from the Song of Solomon allegorically, likening the saints to the healthy teeth of the Church (*quasi dentes ecclesiae*): “They bite men off from their heresies and carry them over to the body of the Church when their hardness of heart has been softened as if by being bitten off and chewed.” Wolfram von Eschenbach praises a lady’s kissable mouth by saying:

\begin{quote}
*Von snêwîzem beine*  
*Nâhe bî ein ander kleine,*  
*Sus stuonden ir die liechten zene.*  
[Of snowy-white bone,  
close-set and tiny,  
her radiant teeth were ranged]  
(Parzival, Sec. 130, ll. 11-13)
\end{quote}

And the pretty heroine of *Aucassin et Nicolette* is characterized by “*les dens blans et menus*” (xii, 22).

Yet in these fairly infrequent cases we sense that the attribute is singled out precisely because of its rarity: lovely teeth amount to a literary *topos* inasmuch as they belong to a conventional vision of the ideal that seldom finds a counterpart in reality. Indeed, it was regarded as so unlikely that anti-Petrarchan poets in seventeenth-century England often inverted the *topos* in such “deformed mistress” poems as John Collop’s “On Dentipicta: A Lady with Enamell’d Teeth, Black White and Yellow.”

The image of lovely teeth, admired because they are so rare, reaches its weird culmination in Poe’s “Berenice” (1835), in which a young man named Egaeus tells of his fateful love for his cousin, who suffers from a kind of epilepsy that frequently terminates in a deathlike catatonic trance. Egaeus, for his part, is afflicted by a psychological disorder that he calls “monomania”: an “undue, earnest, and morbid attention…excited by objects in their own nature frivolous” (p. 86). One day, when Berenice parts her lips in a smile, Egaeus fixes his attention upon her teeth. From that moment forth he is unable to rid his mind of its obsession with “the white and ghastly spectrum of the teeth. Not a speck on their surface—not a shade on their enamel—not an indenture in their edges…long, narrow, and excessively white, with the pale lips writhing about them” (p. 88). Unable to think of anything else, Egaeus longs for the teeth “with a phrenzied desire” (p. 89) and convinces himself that he could be restored to health if only he could possess them. As this distraught fetishist sits entertaining his morbid lust for his cousin’s teeth, a servant bursts in with the news that Berenice has died of an epileptic fit. After the interment, in a state of shock, Egaeus cowers in his library, trying to decipher some “dim, and hideous, and unintelligible recollections” (p. 90) when again a servant enters with the horrendous report that the grave has been desecrated and the intruder has removed all of Berenice’s teeth. It turns out that Egaeus himself, in one of his seizures, has violated the grave in order to obtain the coveted teeth, which now repose in a box on his desk.

Poe’s tale was allegedly inspired by a report he read in the Baltimore *Saturday Visitor* (23 Feb.
1835) concerning grave robbers who stole teeth for dentists, a ghoulish practice that can be explained by the fact that the first adequate porcelain teeth were not made available to the public on a commercial scale until 1844. (Recall Fantine in Hugo’s Les Misérables, who sells her two front teeth to a dentist for forty francs.) Poe’s obsession with teeth has been interpreted psychoanalytically as a product of his fear of being destroyed by women (the motif of the vagina dentata) or as a surrogate for his obsessional attachment to the womb. In both cases the associations are clearly sexual. But as a literary image—as distinct from Poe’s subjective psychological motivation—Berenice’s teeth are quite conventional: they represent an intensification of the topos of beautiful teeth that goes back by way of the Old Testament to the primitive identification of teeth with potency.

Egaeus’ obsession with Berenice’s teeth makes sense only in an age when lovely teeth are still the exception rather than the rule. With the advent of modern dental science along with advertising, enlarged photographs, and close-ups on television, the situation has changed. The glistening white teeth that were formerly an exceptional attribute to be singled out in song or coveted by an obsessed odontomaniac have now become commonplace.

How pure, how beautiful, how fine
Do teeth on television shine!18

Everyone—from clowns and announcers to masters of ceremony and weather girls—comes equipped with “miles of smiles,” each one an orthodontist’s dream. As a result, many people can sympathize with Phyllis McGinley, who longs for the sight of plain, unadorned, uncapped natural teeth.

‘Twould please my eye as gold a miser’s—
One charmer with uncapped incisors.

In literature the inevitable inversion of the image took place among many writers at the beginning of our century. In his diaries and letters Franz Kafka returns obsessively to his fiancée’s (Felice Bauer) deteriorating and eventually gold-capped teeth. In his volume Morgue (1912) the expressionist poet Gottfried Benn frequently refers to rotting or defective teeth in contexts that would formerly have required the topos of glittering white teeth. The poem “Nachtscafe” depicts the encounter between a young man and a woman in a bar:

Grüne Zähne, Pickel im Gesicht
Winkt einer Lidrandentzündung
[Green teeth, pimply face
Waves to a case of infected eyelids.]

In another poem (“Kreislauf” [“Circulation”]) Benn describes the cadaver of a prostitute, which contains only a single molar—and it has a gold filling. The morgue attendant knocks out the tooth, pawns the filling, and goes dancing for the money he receives, the “circulation” of the title.

The most familiar inversions of the topos occur in the works of Thomas Mann. In “Tristan” (1903) the image is used for an ironic effect. The “carious teeth” of the writer Detlev Spinell contrast not only with his own pretensions to a life of pure beauty but also with the robust health of Herr Klöterjahn, with whose wife Spinell carries on his ineffectual dalliance. In Death in Venice (1912) the image shows up in a more serious context. As Gustav von Aschenbach becomes increasingly infatuated with the Polish boy Tadzio, whom he regards as an ideal of male beauty, he notices that Tadzio’s teeth are not attractive: “rather jagged and pale, without the glitter of health and with a peculiarly brittle translucency” (Ch. 3). This ironic inversion of the topos is expounded theoretically in Doctor Faustus (1947), which introduces the images of “the dead tooth” and “root treatment” to designate conventional esthetic forms that have outlived their time but are resurrected parodistically for modern purposes (Ch. 18).

Finally, Poe’s tale provided the inspiration and motto for a story by the American writer Richard G. Stern. His story “Teeth” deals with an old-maid instructor of English history in Chicago who falls in love with her dentist. In her infatuation she reads up on teeth and dentistry in the encyclopedia, thinks constantly in tooth
metaphors, and “felt the root tremble in her heart whenever Dr. Hobbie leaned over to pass a steel shaft between her strong, white crowns” (p. 17). Her obsession reaches its climax during a nighttime emergency treatment while the dentist is lancing an abscess. In her pain and intoxication, Miss Wilmott recalls Poe’s “Berenice” and translates the operation on her teeth into an act of sexual violation—from Berenice’s point of view! “And out, out they came one by one, her thirty glorious crowns, roots, rapt from her yielding jaws. Oh it was over. She lay back, vacant, depleted, fulfilled” (p. 28). Stern’s story, with its explicit inversion of Poe’s tale, represents the ultimate parody of the tooth as an image of sex and beauty, which goes back through Poe and the Bible to primitive myth and folklore.

III.

The potent and beautiful teeth that concern folklore have little need of dentists; as a result dentists do not often figure in literature before the twentieth century. (Stern’s Dr. Hobbie is of course a colleague of the dentists who appear so frequently in novels of the sixties.) It was left to the visual arts to deal more realistically with the third attribute, the pain of toothache and the related art of dentistry. The activities of dentists and the symptoms of tooth disease have been portrayed in so many drawings, paintings, and sculptures that the history of dentistry has routinely drawn on examples from the plastic arts for documentary evidence. A Scythian vase from the third or fourth century B.C. depicts in realistic detail one of the earliest recorded dental treatments. The main door to the cathedral of St. Mark’s in Venice includes a panel representing a medieval dentist at work on an extraction. Wells Cathedral in Somerset contains a column whose capital depicts a man swollen with toothache (Fig. 1), a work that enjoyed considerable fame in the middle ages because it was rumored that a toothache would disappear if one said the appropriate prayer while visualizing that carving. And St. Apollonia with her attributes—a pair of pincers clasping a gigantic molar—provided one of the most popular subjects of medieval art.
The Dutch artists, with their realism and faintly malicious humor, found a gratifying subject in dentistry. Lukas van Leyden produced a copperplate engraving showing a contemporary dental treatment (Fig. 2). One of Rembrandt’s etchings shows a charlatan hawking remedies for toothache. Jan Steen’s painting “The Tooth Master” depicts an extraction so painful that the patient must be tied down to his chair while a throng of onlookers grins in amusement. Several of Daumier’s cartoons contain dental motifs, notably a picture of a fierce female dentist (“She Stands Her Ground”) in action in an office strewn with huge extracted molars—a treatment with clear sexual implications. In 1862 the German humorist Wilhelm Busch published a series of twenty-five drawings accompanied by rhymed couplets entitled “The Hollow Tooth.” It tells the story of a man named Friedrich Kracke, who bites down on a rotten tooth during his supper. After trying all sorts of home remedies to relieve his pain—smoking, drinking, soaking his head in a bucket of cold water, bandages, sweating—he finally goes to the dentist, who removes the offending tooth. In the fourth chapter of À rebours (1884) J.-K. Huysmans is inspired by the traditions of his Dutch ancestors when he describes in graphic detail a painful visit to the dentist. When Des Esseintes has an abscessed molar that needs to be removed quickly, he goes to a quack whose office is advertised by two cases of artificial teeth in gums of pink composition and wired together with brass. Terrified by the screams and blotches of expectorated blood on the stairs, he almost flees. The huge dentist first breaks off his tooth, then pulls it out, “a blue tooth with a red thread hanging from it.”

In Much Ado about Nothing Shakespeare observes that “there was never yet a philosopher/That could endure the toothache patiently” (v.i.). And the history of art bears this out. The paintings, drawings, and sculptures make it clear that men through the ages, for all their reverence for the beauty of teeth, still find something grotesque, ridiculous, and degrading about the toothache. The patient with the swollen and bandaged jaw, with fearful eyes and gaping mouth, groveling in abject helplessness before a dentist who is usually portrayed as a charlatan or brute, provides unusual and challenging poses for the visual arts. But in literature it was considered unsuitable for anything but the sadistic comedy of Wilhelm Busch or the grim ironies of Huysmans. Then suddenly, in the second half of the nineteenth century, authors began to emerge who made a virtue of the very agony of toothache.

IV.

The narrator of Dostoevsky’s Notes from Underground (1864) devotes a short chapter to teeth, which differs notably from all the other examples that we have considered: toothache is cited here as an example of the narrator’s ability to derive edification from his own self-degradation. “Even in toothache there is enjoyment,” he insists. “I had a toothache for a whole month and I know there is” (Ch. 4; Garnett trans.). The narrator makes the point that man derives pleasure from the utter humiliation of pain represented by toothache: aware that there is no enemy to punish for his pain, he is in complete bondage to his teeth and conscious of his all-too-human condition. “In all these recognitions and disgraces it is that there lies a voluptuous pleasure,” he argues. As a result, the educated men of the nineteenth century, who are intelligent enough to understand the meaning of their pain, take a positive pleasure in their own moans, which represent an advance of human consciousness. We have come a long way indeed from the malicious humor of Dostoevsky’s contemporaries, Wilhelm Busch and Huysmans.
From Dostoevsky it is only a short step to Hans Christian Andersen, who was similarly obsessed with the agony of toothache, from which he suffered excruciatingly toward the end of his life. But instead of reveling in his agony, like his Russian contemporary, Andersen sought to sublimate his pain through art. The last story he wrote is called "Auntie Toothache" (1872), a reference to the narrator’s elderly friend who had endured much pain from her teeth during her youth.22 This Aunt Mille, who stuffed children with sweets, first suggested to the narrator that he should become a poet; so from his earliest days the agonies of poetic creation are associated in his mind with the toothaches caused by Auntie Mille’s candies. One night, while he and Auntie Toothache sit up chatting about old times, she recalls the day when he got his first tooth, “the tooth of innocence.” When he goes to bed, he is disturbed by a violent storm outside and by the throbbing that announces the onset of a severe toothache. Suddenly in the moonlit room the shadows seem to assume a vague shape. Becoming more and more corporeal, the shadow reveals itself as Old Mother Toothache, who is pleased to have found such a cozy refuge. “’So you’re a poet,’ she said; ’just wait, I’ll teach you to write poems, to write in all the meters of pain.’” Telling him that his mouth is “a splendid organ on which I intend to play,” she threatens him by saying that the greater the poet, the greater the toothache. The narrator objects that he is no poet at all, that he had merely suffered a passing attack of “poetitis.” After forcing the poet to acknowledge that she is mightier than poetry, philosophy, mathematics, and music, Old Mother Toothache boasts that she is older than all other feelings and emotions. Born in the garden of Paradise, it was none other than she who prompted Adam and Eve to get dressed because of the cold. She promises to depart only if the narrator will swear never again to write verses. When the young man wakes up in the morning, he still confuse's dream and reality, seeing Old Mother Toothache in the person of Aunt Mille. But he remains true to his promise. Although he has written down the present account, he concedes, it is prose, not verse, and not intended for publication.

Andersen’s melancholy tale, written only three years before his death, is clearly an attempt to conquer his own suffering through humor and esthetic form. Yet, in the combination of toothache (i.e., suffering) and art, he belongs to a romantic tradition that culminates in authors such as Thomas Mann. It is well known that Mann inherited the belief prevalent in German thought at least since romanticism that art and beauty are somehow related to, even a product of, disease. The Magic Mountain is “magic” in large measure because it is a tuberculosis sanatorium with the feverish consciousness generated by that affliction; the growth of Adrian Leverkühn’s music, in Doctor Faustus, is accompanied by the worsening of the syphilis that ravages his body. It is perfectly consistent with this attitude, therefore, that Mann’s figures are often characterized by the state of their dental health: we have already noted two examples. But in the 800 pages of the novel Buddenbrooks (1901) Mann has the time and space to develop more fully the implications of his odontological images. Buddenbrooks bears the subtitle “The Decline of a Family.” But the German (Verfall) also permits the translation “The Decay of a Family,” a translation that brings out the parallel between the deterioration of the prosperous North German family in the course of four generations and the decaying teeth that both characterize and ultimately precipitate the deaths of the last two males of the family line. Within the first few pages we are told of the “small and yellowish teeth” that ominously mar the appearance of the otherwise handsome and elegant Thomas Buddenbrook. These teeth, plus a certain fastidiousness of manner, are the first indications that Thomas has lost some of the robust vigor that brought the two preceding generations of Buddenbrooks to a position of wealth and prominence. So it is appropriate that Thomas’ death, some forty years later, is signaled by a violent toothache that forces him to leave a meeting of the Municipal Senate and, in his agony, to seek out the dentist. When the dentist attempts to extract the rotten molar, the crown breaks off. Unable to endure the pain of a root extraction, Thomas leaves.
the dentist’s office; but just outside he collapses in a puddle of mud and blood and dies—as rumor puts it—“because of a tooth.”

The description of Thomas Buddenbrook’s agony in the dentist’s office (Bk. IX, Ch. 7) is a small naturalistic masterpiece, and because of the prominence of the scene the dentist himself assumes an important role in the novel. It is said of Dr. Brecht that his very name suggests the noise one hears in the jaws when the roots of teeth are being forcibly removed. (Bk. VIII, Ch. 7). Dr. Brecht has no television set in his office, but his waiting room is attended by a parrot named Josephus, who invites patients to “Have a Seat.” Otherwise, Dr. Brecht bears little resemblance to Grass’s self-confident dental technologist in tennis shoes. Corrupted by the pain and fear of his own art, he breaks into a sweat whenever he has to extract a tooth and then collapses afterward in an exhaustion equal to that of his patient.

Dr. Brecht’s office is the common ground where Thomas Buddenbrook and his son Hanno meet in their suffering. Hanno, to be sure, dies of typhus, not from his teeth. But as a true son of the family, with a fateful talent for music, he has inherited his father’s bad teeth: although in appearance white and lovely like his mother’s, they are soft and vulnerable underneath. In the many pages between the first mention of Thomas Buddenbrook’s yellowish teeth and his death outside the dentist’s office, Hanno’s agonies serve to remind us of the poor teeth that symbolize the decaying family. Hanno almost dies as a result of the fever and cramps attending the cutting of his baby teeth. When he begins to get his permanent teeth, he falls into a fever and suffers nights of torment. His teeth grow so badly that Dr. Brecht has to remove four molars to make room for the wisdom teeth; this operation, which takes four weeks, is followed by a week of illness during which Hanno is too weak to get out of bed. The condition of his teeth, which are repeatedly mentioned throughout the novel, is so deplorable that it not only affects his emotional state; it also produces gastric disturbances, dizziness, and palpitations of the heart.

In Thomas Mann’s works the dental images are still largely personal and “psychodontic”; they are attached as a symptom of disease and weakness to individuals who, according to Mann’s conception, have been debilitated by art or beauty. Only the fact that Hanno Buddenbrook inherits his father’s poor teeth suggests that Mann is using the decay of teeth for a larger purpose, to signify the decay of an entire family, and, by implication, of civilized European society as a whole. Forty years later two other novelists developed these implications more elaborately.

V.

In Arthur Koestler’s Darkness at Noon (1940) the throbbing toothache that plagues Rubashov throughout the weeks of his interrogation is no longer a sign of esthetic degeneration, as it was for Hans Christian Andersen and Thomas Mann. It has become, in a very literal sense, a reification of the word “remorse,” which refers etymologically to teeth and biting (re-mordere, “to bite again”; cf. Middle English “the agenbite of inwit”). N.S. Rubashov, a chief Party functionary, is being tried for his life on trumped-up charges of plotting against the life of the Party leader. Both the accused and his interrogators know that the charges are false, but the trial revolves around the question of motivation and plausibility. Given his defection from strict Party ideology, would such attempt be consistent with Rubashov’s beliefs? When he finally confesses, Rubashov is shot in the back of the neck and the novel ends.

Rubashov’s tooth trouble—stemming from a defective eyetooth broken off at the root while he was being tortured by the Fascists—dates back to 1933 when for the first time he felt stirrings of personal concern for a Party agent in Germany. During his interrogation the tooth begins to throb every time the discussion turns to people from his past with whom he had felt any involvement going beyond legitimate Party commitments: the young agent in Germany, a Party organizer in Belgium, the secretary with whom he had had an affair. These intrusions of personal memory always occur “without visible cause and, strangely enough, always accompanied by a sharp attack of toothache” (p. 110).
References to toothache occur several dozen times in the course of the novel. On the first day of his imprisonment Rubashov reports sick because of toothache, and several days later he is taken to see the doctor, who offers to remove the root of the broken eyetooth. But Rubashov refuses, hoping that the abscess will open by itself. On days when he is afflicted deeply by memories of betrayed friends, the toothache flares up so violently that his whole cheek becomes swollen. At other times, when he develops a new theory of historical necessity that enables him to justify his past behavior, the toothache goes away for a time. All indications make it absolutely clear that the toothache symbolizes the individual conscience, which refused to be consoled by the Party doctrine that the end justifies any means.

However, the odontological image is even more complex. For it is rooted in a broader organismic metaphor that depicts the Party as a living body. In reference to the situation in Germany after 1933, for example, Rubashov reflects: “The Party was no longer a political organization; it was nothing but a thousand-armed and thousand-headed mass of bleeding flesh. As a man’s hair and nails continue to grow after his death, so movement still occurred in individual cells, muscles and limbs of the dead Party” (pp. 3-32). When he thinks of the corrupt Party of the present, “The Party’s warm, breathing body appeared to him to be covered with sores—festering sores, bleeding stigmata” (pp. 57-58).

It is only in the context of the organismic conception of the Party that the consistency of the toothache image becomes apparent. Just as conscience, like toothache, pains the individual, so the questioning individual becomes the rotten tooth that torments the body of the Party. Fittingly, it was in the guise of a salesman of dental equipment that Rubashov went to Germany in 1933 to heal the ailing Party organ. When he compiled his list of reliable Party members, he wrote down their names and addresses in his order book in spaces left between the names of actual local dentists. What Rubashov only slowly realizes is that by developing an individual conscience, he has himself become a rotten tooth in the body of the Party. Rubashov with his aching tooth of conscience therefore becomes the infected tooth that must be removed. Appropriately, his executioner is twice described with dental images. As he speculates on the procedure of execution, Rubashov wonders if “perhaps he hid the revolver in his sleeve, as the dentist hides his forceps” (p. 137, p. 265).

One of the secondary motifs connected with the ontological image in Darkness at Noon is pain. As Rubashov contemplates the possibility of torture during his interrogation, he reminds himself that “every known physical pain was bearable; if one knew beforehand exactly what was going to happen to one, one stood it as a surgical operation—for instance, the extraction of a tooth” (p. 51). In Graham Greene’s The Power and the Glory (1940) this motif becomes a central theme. Greene’s “whiskey priest,” the last representative of the Church in a Marxist state, confesses that he has “always been afraid of pain” (p. 278); he is obsessed with the thought of the death that awaits him when the government police catch up with him. When others try to reassure him about the pain of being shot, they tell him that “toothache is worse” (p. 170). Appropriately, it is a representative of this dental pain through whose consciousness we enter the world of the novel. Mr. Tench, the dentist, is an expert in pain: “it was his profession” (p. 62).

In this novel, which begins with the dentist going down to the docks to locate his cylinder of ether—the pain-killer!—the author develops a veritable rhetoric of odontological images. Unlike Koestler, Greene does not fasten his dental images principally on the hero and his conscience. The whiskey priest, who has broken his vows by becoming a drunkard and sleeping with a woman, is characterized by the bad teeth of decay. Mr. Tench notices that “one canine had gone, and the front teeth were yellow with tartar and carious” (p. 18). Almost as in a story by Thomas Mann, he concludes that “death was in his carious mouth already.” It would be possible to set up an elaborate scale of tooth decay in this novel, for virtually every figure is characterized by the state of his dental health. Almost the only person with sound teeth is a pious woman whom the priest encounters in jail. “He saw the pious
woman a few feet away—uneasily dreaming with her prim mouth open, showing strong teeth like tombs” (p. 180). Ranging down from this pinnacle of health—that is, intact faith—we find varied stages of decay. The simple soldiers and policemen, who have deserted their faith and sold themselves to the government, invariably have gold teeth. On the first page, for instance, as Mr. Tench walks down to the pier, he meets a guard who “stared malevolently up at Mr. Tench...as if Mr. Tench were not responsible for his two gold bicuspid teeth” (p. 9).

If those who have unthinkingly switched their allegiance from Church to State are characterized by gold teeth, those motivated by more opportunistic impulses are not so fortunate. When Mr. Tench reaches the warehouse, the customs agent is complaining about his teeth. “The man had none: that was why he couldn’t talk clearly: Mr. Tench had removed them all” (p. 11). One of the worst cases is the corrupt Chief of Police, whose moans punctuate the novel from start to finish. When we first meet him, he is holding a handkerchief to his mouth. “‘Toothache again,’ he said, ‘toothache’” (p. 28). Later he complains about his tooth, saying that “It poisons the whole of life” (p. 30). Mr. Tench tells him, in fact, that “I’ve never seen a mouth as bad as yours—except once” (p. 292). (We are told nothing about the teeth of the police lieutenant who relentlessly pursues the whiskey priest. But to judge from the explicit contempt with which he greets the laments of his superior, this priestlike young Marxist must have a perfect set of teeth, like the pious woman.) Even more formidable are the teeth of the villain—the half-caste who betrays the priest and lures him back across the border to his capture and execution. “He had only two teeth left—canines which stuck yellowly out at either end of his mouth like the teeth of long-extinct animals which you find enclosed in clay” (p. 114). On almost every occasion when he is mentioned, the mestizo’s yellow, fanglike teeth are cited as a leitmotif of identification and characterization. It needs to be stressed again that the elaborate rhetoric of dental images is meaningful only in the larger context of the novel: for Greene is portraying a society that is falling apart with corruption and decay. The Church driven out, a moral vacuum has been created that is not yet filled by the new regime, which in itself is corrupt.

VI.

If we look for the common denominators that link these various fictions using odontological images, it is conspicuous that many of them deal with the notion of pain: the spiritual agony that accompanies artistic creation or social conscience. Now the toothache is an apt image for this kind of pain, as Ogden Nash puts it,

Because some tortures are physical
and some are mental,
But the one that is both is dental.  

Dostoevsky’s “underground man” uses toothache as an occasion to expatiate on the degradation of pain. Hans Christian Andersen sublimates his own pain in a story about Auntie Toothache. When Rubashov contemplates physical pain, he thinks first of toothache. Greene’s whiskey priest is obsessed with pain, which nevertheless he manages finally to bear with a certain degree of human dignity. The aching gums of Bellow’s Henderson announce the presence of something beautiful. And Grass’s novel ends with the words: immer neue Schmerzen—“there will always be pain.”

But the characteristic that distinguishes most twentieth-century dental images from earlier ones is the shift in emphasis from psychodontia to sociodontia: decaying teeth now represent with increasing frequency society as a whole and not just the esthetic or moral agony of the individual. G. B. Shaw once remarked (1909) that “the nation’s morals are like its teeth: the more decayed they are the more it hurts to touch them.”  

There died a myriad,
And of the best, among them,
For an old bitch gone in the teeth,
For a botched civilization.
And in *Fantasia of the Unconscious* (1923) D.H. Lawrence expanded the image in his indictment of a debilitated Western world:

And we, in our age, have no rest with our teeth. Our mouths are too small. For many ages we have been suppressing the avid, negroid, sensual will. Our mouth has contracted, our teeth have become soft and unquickened. Where are the sharp and vivid teeth of the wolf, keen to defend and devour? If we had them more, we should be happier. Where are the white negroid teeth? Where? In our pinched little mouths they have no room. We are sympathy-rotten, and spirit-rotten, and idea-rotten. We have forfeited our flashing sensual power. And we have false teeth in our mouths (Ch. 5).²⁸

This is essentially the sentiment underlying *Buddenbrooks*, where the “decay” of the family finds its analogy in the decaying teeth that torment Thomas Buddenbrook and his son Hanno. The same thought is implicit in *Darkness at Noon*, where the incapacitating remorse of conscience must be extracted from the body of the Party if it to remain socially healthy. The various degrees of rotten teeth among the denizens of Greene’s world symbolize the corruption and decay of the society itself. Eberhard Starusch’s agonies in the dentist’s chair correspond to the agonies of an entire people trying to come to terms with its past. All these writers share with Vonnegut’s Reverend Doctor Lionel Jason David Jones an explicitly “political interpretation of teeth.”

Various diseases and afflictions have been singled out from time to time to symbolize the state of society. One German cultural historian was led by his findings to the conclusion that “civilization is syphilization.”²⁹ And other critics have sought less drastic analogues in tuberculosis, leprosy, limping, madness, and defective vision.³⁰ An equally good case could be made for paralysis (e.g., Joyce’s *Dubliners*), cancer (e.g., Solzhenitsyn’s *Cancer Ward* or Bernanos’ *Diary of a Country Priest*), or meningitis (e.g., Hesse’s *Rosshalde*, Huxley’s *Point Counter Point*, and Mann’s *Doctor Faustus*). Yet of all these symbolic afflictions none is more appropriate than tooth decay. For dental history demonstrates statistically that the incidence of tooth decay varies in direct proportion to the level of civilization. Of all the Stone Age skulls recovered in Denmark, for instance, only fourteen percent reveal any evidence of caries; the incidence of tooth decay among citizens of modern Copenhagen is close to ninety-five percent. By the same token, caries, almost wholly absent in the earliest Egyptian mummies, occurs with increasing frequency in later ones. So it is not just a catchy conceit when a writer suggests that tooth decay symbolizes the decay of a society. As a matter of fact, the decay of a society—to the extent that contemporary development is regarded as deterioration—in all probability does involve a significantly higher incidence of tooth decay.

Now we have seen—notably in the novels of Koestler, Greene, and Grass—that the odontological images are justified within the text by an organismic view of society. How, we might inquire in conclusion, did this view arise? Today we have become so inured by the rhetoric of social critics to the notion of a “sick” society that we no longer examine the implications of the metaphor, which has been trivialized through thoughtless use into a cliché. But literary images do not arise fortuitously and at random; they are usually consistent with, and an expression of, fundamental assumptions shared by the society that produces them. The images of social disease and decay go back to the organismic conceptions of the state that arose in the late eighteenth century as a response to specific historical circumstances.

Political thinkers of the seventeenth and eighteenth centuries generally believed in the “natural rights” of the individual, and they assumed that individuals established governments by “social contract” to suit their needs.³¹ According to these rationalist theories, in other words, government is a man-made institution created in line with ideal principles of reason. The language of the Declaration of Independence makes it clear that our Founding Fathers regarded the state in this light as a human construct of convenience and prudence, to be modified at will. (E.g., governments are “instituted”; political bands can be “dissolved”; and so forth.) this generally “mechanistic” view of government and the state can be detected in the rhetoric of most revolutionary societies. For it is inherent in the nature of revolution that established government be
regarded as a temporary institution of convenience rather than as an eternal form with any claim to higher sanction.

It was in reaction against these revolutionary doctrines that the organismic conceptions of the State first arose. There had of course been earlier use of biological analogies in political writings. Under the influence of biblical allegoresis various medieval thinkers, like John of Salisbury, constructed schemes according to which each segment of the State could be equated with a specific part of the human body. But his thinking was purely analogical. When Rousseau wrote in Le Contrat social that the legislative power is the heart of the State and the executive branch its brain, he did not believe for an instant that the State had actually grown organically, like a living body. It was among conservative thinkers, principally in Germany, that the State began to be viewed as an organism in explicit opposition to the mechanistic theories of the Enlightenment. The metaphorical organicism so conspicuous in the works of Herder and Goethe, for instance, expressed their hostility to the mechanistic view of man and his institutions.

Fichte, in his theory of natural law (Grundlage des Naturrechts, 1796), presented the State as a product of nature, not as man-made; hence it cannot be tampered with or discarded in favor of a new State, as the revolutionaries were doing on the other side of the Rhine.

In the hands of such publicists as Adam Müller and Joseph Görres the organismic theory of the State became one of the most familiar weapons in the rhetorical arsenal of nationalistic propaganda. At the same time, organicism was rapidly applied to other areas of human society and its institutions. Karl Friedrich Eichhorn and Friedrich Carl von Savigny put the study of jurisprudence on a wholly new basis by presenting the law as an organic growth. Romantic philologists like Wilhelm von Humboldt and Jakob Grimm taught that language itself is the product of organic growth, and not a static absolute.

In the mid-nineteenth century, under the impact of this romantic historicism and the emerging science of biology, the organismic metaphor was gradually adapted to society as a whole. As early as the 1830’s Comte had argued that the maladies of the social organism are accessible to pathological analysis. But it was Herbert Spencer, in his Principles of Sociology (1878-80), who made the first consistent use of the biological analogy, speaking of the growth, development, differentiation, and evolution of social bodies in precise parallel to the evolution of plants and animals. By the nineties the organismic metaphor for society had become commonplace. Paul von Lilienfeld insisted in La Pathologie Sociale (1896) that the analogy is not merely rhetorical. The social organism has cellular substance, social tissues, anatomical elements, and progressive evolution. But like all organisms it is subject to political decay. Therefore a science of social therapeutics is required to correct the pathological state, and the statesman becomes the doctor of society. (At this point we can already hear the familiar cadences of Grass’s dentist.) In the same year René Worms published a book on Organisme et société (1896), which concludes with a chapter on the “Pathology, Therapeutics, and Hygiene” of society.

It was during this period that Max Nordau wrote his notorious attack on the “degenerate” literature of the fin de siècle under the telling title Entartung (1893). In his preface Nordau pointed out that the idea of organismic degeneration had already been applied fruitfully in the fields of penal code, politics, and sociology, but that no one had yet considered literary culture in that light. Accordingly, his book opens with chapters on the symptoms, diagnosis, and etiology of the degeneration that he detected in contemporary cultural life. In Thomas Mann’s early works we find a direct echo of this controversy concerning healthy and unhealthy art, which reached its peak around the turn of the century. But at the same time, among historians and sociologists, opposition to the organismic theory of state and society was beginning to make itself felt. In all likelihood the organismic analogy would have been relegated permanently to the intellectual dustbin as an oddity of nineteenth-century philosophy of history had it not been revived in one of the most influential works of the twentieth century: Spengler’s so-called “morphological” interpretation of history, which
popularized the view that cultures are (and not: are like) organisms.  

To recapitulate: by the end of the nineteenth century the conventional image of the tooth with its attributes of potency and beauty had been exhausted. It still sufficed for “psychodontic” analysis as long as its implications were restricted to the individual who is debilitated by his art. But the works of Poe, Andersen, Benn, Mann, and others reveal that it was an overwhelmingly great temptation for the writer to invert the overworked image into parody. Just at this point, when the popular tooth image had been liberated by parody from its traditional associations, various social thinkers revitalized the organismic theory of society. It seems plausible to assume that writers like Koestler and Greene, who perceived society as an organism and were obsessed by their visions of its decay, found in teeth a familiar literary image that was now free to accommodate new and timely organismic associations. In other words, Grass’s sociodontist can peer into his patient’s mouth and see society largely because so many generations of post-romantic sociologists and cultural historians have looked at society and seen an organism.

Notes

1. örtlich betäubt (Neuwied: Luchterhand, 1969); hereafter cited from the English trans. By Ralph Manheim: Local Anaesthetic (1970; rept. Greenwich, Conn.: Fawcett, 1971). The pathological philosophy of history is not original with Grass, of course. In the nineteenth century it was so widespread that in War and Peace (Bk. X, Ch. 28) Tolstoy challenged the notion that the French suffered such heavy losses in the battle of Borodino because Napoleon had a cold. In support he cites Voltaire’s cynical quip that the Massacre of St. Bartholomew’s Day occurred because Charles IX had an upset stomach.

2. Grass has used tooth images in many of his works to represent professional incompetence, artistic sterility, suppressed aggressiveness, and sexual impotence. See Carl O. Enderstein, “Zahnsymbolik und ihre Bedeutung in Günter Grass’ Werken,” Monatshefte, 66 (1974), 5-18. But in no other work is the image developed with such consistency and so centrally as in this novel. Heinrich Böll frequently uses rotting teeth to symbolize the ravages of poverty in the individual: cf. Fred Bogner in Acquainted with the Night (Und sagte kein einziges Wort, 1953) and Wilma Brielach in Tomorrow and Yesterday (Haus ohne Hüter, 1954). But he does not use the image more generally to characterize society as a whole.

3. This confident assessment of dentistry is not quite so parodistic as Grass might have intended it. In 1936 Lewis Mumford wrote the following statement to be enclosed in a time capsule: “The best you can do to represent our age of concrete, subway-excavating, scientific skill, fine measurements and physiological knowledge is to enclose a human tooth with the root canal filled and the crown anatomically restored with a gold inlay.” Quoted by Israel Shenker in “Words Intended for Next Millenium [sic] on View,” New York Times, 2 March 1973, p. 33, col. 6.


11. *The Portrait in the Renaissance*, The A. W. Mellon Lectures in the Fine Arts, 1963 (New York: Pantheon, 1966). This observation is borne out by Lavater, who states in the introduction to his *Physiognomic Fragments* (1775-78) that the focal point of all physiognomy is “the closed mouth at the moment of perfect tranquility.” See J. C. Lavater, *Physiognomik: Zur Beförderung der Menschenkenntnis und Menschenliebe*, rev. ed. (Vienna: Solinger, 1829), I, 10. Lavater concedes that an entire volume could be written on teeth alone; but he restricts himself to a single page since he finds so little evidence in the visual arts (III, 83-84).


15. See Timothy C. Blackburn’s informative response to the original publication of this chapter in “Forum,” *PMLA*, 91 (1976), 461-62.


26. Preface to *The Shewing-Up of Blanco Posnet*, in *The Complete Prefaces of Bernard Shaw* (London: Hamlyn, 1965), p. 436. Shaw continues: “Prevent dentists and dramatists from giving pain, and not only will our morals become as carious as our teeth, but toothache and the plagues that follow neglected morality will presently cause more agony than all the dentists and dramatists at their worst have caused since the world began.”


Introduction

The frena of the tongue and lip are normal structures of the buccal cavity, and surgical resection is only necessary in cases of hypertrophy. This article looks at medical texts of the Early Modern Era to analyze the origins and quality of our knowledge on this topic and examine any therapeutic measures proposed.

This review shows that while the indications for carrying out tongue frenectomy are very similar to those today (speech and breastfeeding difficulties), those for carrying out a lip frenectomy are very different. Interestingly, apart from purely surgical or medicinal treatments, some authors indicated the need to complement such treatment with educational intervention and what can only be called basic speech therapy.

At present, being “tongue-tied,” as it is popularly known (hypertrophy of the lingual frenum), can be determined within days of birth, when the child shows difficulties in moving his tongue, particularly during breastfeeding. This problem may also be detected later, when the child is seen to have difficulties in pronouncing certain sounds, such as the phoneme /r/, where it is a vibrant voiced linguo-alveolar sound. In both cases, the usual treatment is lingual frenectomy, which in older children may also require consultation and treatment involving a speech therapist.

Regarding hypertrophy of the lip frenum, the purpose of frenectomy is encourage closure of an interstitial diastema, concomitantly with
orthodontic treatment, and should not be performed until the upper canine teeth appear.

**Tongue Frenum Hypertrophy and Its Treatment in Texts**

Spanish texts prior to the 18th century contain few references to tongue frenum hypertrophy. Those that do refer to an author who had wide influence in European medicine, Guy de Chauliac (c. 1298-1368), whose *Chirurgia Magna* was published in 1363. Born in Chauliac (Lozère, France), de Chauliac is considered the father of medical surgery, since he received medical training in addition to being a surgeon. Indeed, he was the personal physician to several popes, and his *magnum opus* was translated into several vernacular languages. In Spain, it was first published in Latin (c. 1479-80), then Catalan (1492) and finally translated into Castilian, in which language and in the hands of a variety of translators and commentators it ran through as many as nine editions between 1493 and 1596. It was still regularly published in the 17th century. In this work—see, for example the translation of Carnicer (1555, p. 241) or that of Infante de Aurioles (1658, p. 507) a century later—a brief mention is made of the recommended treatment, which consisted of tying a thread around the frenum and gradually tightening it until it was cut through after some days.

Among the original works that most mentioned this subject was that of Fragoso (1581, p. 169, second edition in 1607), who assumed that the frenum was a normal structure with a specific function, that should only be treated when too big, and taking care not to damage nearby vascular or nervous structures:

> The frenum, which the Greeks called *Ankyglosson*, the Romans *ligatio lingua*, and modern people tongue tie or thread, is [formed of] a nervous substance. It arises from the tunic that covers the tongue and the mouth as a whole. Nature designed it to prevent the tongue from sticking out more that necessary. However, sometimes it is too much and speech and breastfeeding are impossible, so that wet-nurses frequently put their finger in the newborn's mouth to see if the tongue thread is too tight. But if it appears later it can be cut, taking care with some veins that Paulus [Paul of Aegina] says are hidden and avoiding (as Realdo [Realdo Colombo] advises) some nerves that come down there from the seventh pair of the cranial nerves.

Fragoso proposed surgical excision and washing the wound with rosewater or honey. However, he suggested not operating on newborns. He also proposed tongue exercises that would help overcome the limitations of this anatomical abnormality.

Although he does not mention the surgical technique to be used, he wrote that when the frenum is short and thick, given the risk of bleeding, the intervention should be substituted by a thread tied around the frenum, which will slowly break it through pressure, a technique described by the above-mentioned authors in previous centuries.

Another text, the posthumously-published work of Hidalgo de Agüero (1604, p. 218), limited the discussion to an anatomical and functional description, already outlined in Fragoso, mentioning its thread-like appearance, its common nervous origin with the buccal mucosa, and its function to restrict tongue movements.

In the 18th century, publications appear that reference the concept of being tongue-tied. Porras (1716, p. 511), addresses this abnormality by referring to a ligament that, joined from the tip of the tongue, prevents children from breastfeeding, and which surgeons usually cut.

Martínez (1730, p. 127-8) (Fig. 1), in an anatomical and functional description, identifies the frenum as a ligament in the mid-anterior part of the tongue that should be “loose” to permit the tongue to move, while, if “short,” will prevent the child from breastfeeding and may have to be cut. The author warns of the risk of complications such as convulsions if the nerves below the tongue are touched or bleeding, in the event that blood vessels that exist in the same area are cut. He also mentions the difficulty of breastfeeding and stuttering as indications for frenectomy. The technique uses scissors:

> “[…] open the child’s mouth by pressing the jaw with the thumb of the left hand, lifting the
tongue with the index finger to reveal the area, and in this position pass the scissors between the fingers to cut the frenum as close to the tongue as possible.

Hervás (1789, vol. 1, p. 204-5) wrote that wet-nurses frequently exaggerated the problem, and that many times when he had been called to deal with it, the frenum was seen to be sufficiently long and no treatment was necessary. Observing that /l/ and /r/ were the main sounds affected by frenum hypertrophy, he suggested that parents had an essential role in the problem and should play with the sounds and encourage their children to do the same. This physician, who was also a priest, was obviously a speech therapist ahead of his time.

Regarding surgical treatment, Hervás also described the scissors technique, followed by rinsing with wine. This author not only refers to classical and Spanish authors, but also to other European surgeons and anatomists, such as Jean Louis Petit (1674-1750), director of the French Académie Royale de Chirurgie, and Joseph Clement Tissot (1750-1826), who broke with classical doctrine by recommending mobility for surgical patients.

Velasco (1780, p. 373-374) describes scissors surgery for this ailment, but warned of the danger of damaging nearby arteries with the scissors. To prevent any recurrence, he recommended that the wet-nurse touch the area two or three times a day and put ground salt under the tongue immediately after surgery.

Ginesta (1797, p. 4) opposed the practice of trying to break the frenum by manipulating the tongue, or introducing any kind of instrument, and suggested that a surgeon be involved in both the decision and the procedure. This attitude may be well understood given the fact that wet-nurses frequently broke the newborn’s frenum with their nails without thinking of the consequences; and the exaggerated reaction of the same group, who would attempt to cut the frenum as soon as the baby made a strange noise when breastfeeding (Demerson, 1989).

Upper Lip Frenum Hypertrophy and Its Treatment.

A review of the literature shows that the indications for labial frenectomy were completely different from present-day indications. Today, frenectomy and orthodontic treatment are combined to facilitate the closure of the diastema between maxillary central teeth. In the 15th and 16th centuries, labial frenectomy was basically associated with a cure for scrofula (lamparón in old Castilian).

Lamparones (plural of the word lamparón), therefore, would simply have been infractioned ganglia,
which would explain why labial frenectomy was performed so often on children, in whom the disease is more frequent, as can be deduced from the following words of Francisco Díaz (1575, p. 147-8):18

“Lamparones arise from the humor we call vitreous in any part of the human body, but mostly in the neck, armpits, groin and extremities. It is most frequent in the young.”

Fragoso (1581, p. 247) is of the same opinion,9 since, when asked whether this problem was contagious, he said that it was because it was common in children whose wet-nurse had buboes. Among the authors of the time who recommended frenectomy to treat lamparones were Arias Benavides19 (1567, p. 160) and Díaz (1575, p. 153),18 who recommended, in addition to frenectomy, other buccal treatments such as cutting the veins below the tongue, and even cauterizing ear cartilages (Fragoso, 1581, p. 247).9

Lip frenectomy was also recommended at this time, for example by Hidalgo de Agüero (1604, p. 121),10 as a treatment for another buccal process called cracked lips or perillas in old Castilian. This problem gradually disappeared from the literature, and no Spanish author in the 17th century mentioned it. In the 18th century, only two authors mention lip frenectomy—in children with cleft palate, so that the presence of upper lip frenum hypertrophy would not complicate lip surgery. For example, speaking of harelip and cleft palate Velasco (1780, p. 383) writes:15

“If the division is in the centre of the lip, the frenulum which ties it to the gum should first be cut so that it does not inconvenience the operation, but if the division is not in the middle, this precaution will be useless.”

Ruiz Tornero (1788, p. 152) (Fig. 2), mentions20 the same in connection with harelip and cleft palate.

Conclusions

A review of the medical texts of the era studied show that while the indications for a lingual frenectomy are very similar to those today (speech and breastfeeding difficulties), those for carrying out a lip frenectomy are very different. During the 16th-18th centuries, a frenectomy was recommended for lamparones/scrofula (infracted ganglia) or perillas (cracked lips), while presently it is performed in connection with orthodontic treatment to encourage diastema closure. However, this type of frenectomy gradually disappeared from the literature in favor of more functional and aesthetic surgical indication, such as the correction of a harelip, which is closer to modern-day recommendations.

It is particularly interesting that, apart from purely surgical or medicinal treatments, some authors pointed to the need to complement such treatment with educational intervention, and the exercise of what can only be called basic speech therapy.

Fig. 2. First page of a Memorandum by Ruiz Tornero (1788) on the surgical treatment of of harelip and cleft palate.
References


The Progress and Social Impact of Dentistry in the Dominican Republic

an address delivered by Dr. Anselmo Paiewonsky

Editorial Introduction

The manuscript of the following address was not discovered until after Paiewonsky’s death in 1975. It appears to have been given at the dedication of the modernized dental clinic at the University of Santo Domingo in January 1942. Attending this ceremony were the Commanding Colonel of the “President Trujillo” University Guard; and the President of the Directing Superior Junta of the “Trujillista Party,” Dr. Teódulo Pina Chevalier. The “political correctness” that is evident throughout this talk, we may assume, was for their benefit. However, even at that time Paiewonsky was skeptical of the Trujillo regime.

Biography

Ansel Pines was born Anselmo Paiewonsky on July 15, 1901 in Samaná, Dominican Republic. His parents, Moses and Isabel (née Braudo) Paiewonsky were from Vilkivisk and Mariampole, Lithuania, respectively. Moses emigrated to the Virgin Islands in the late 1880s. He and his brothers operated a general store called Riesse’s, which is now one of the main department stores in Charlotte Amalie in the Virgin Islands. At some point in the 1890s, Moses and his brother Zorach left the Virgin Islands to take over a store in Samaná, Dominican Republic. Then they returned to Lithuania to find brides, who returned with them to Samaná. Ansel had three brothers: Luis, Jose and Benjamin. Their father Moses died of Bright’s disease in 1914, leaving Isabel to raise their sons. She moved to Puerto Plata. At that time, Isabel and her sons were probably the only Jews in the Dominican Republic.

In 1916, the United States occupied the Dominican Republic. In 1918, when he was 17, Ansel assisted a group involved in opposing the occupation. He was arrested and turned over to his mother. She promptly sent him to Brooklyn, New York, to the Price family, relatives of the Paiewonsky family by marriage. Ansel, who had dental training in the Dominican Republic, attended high school and college in New York and learned to speak English and Yiddish. At age twenty-three, while still in school, he married Marian Price. Apparently, Isabel was unhappy about the marriage and cut off his financial support, leaving him to work his way through school.
In 1928, the year that he became an American citizen and changed his name to Pines, Paiewonsky enrolled in the New York University Dental School. Because of an altercation with a professor there, he withdrew and transferred to the St. Louis University Dental School, from which he graduated in 1932. Because of the Great Depression and the fact that he had lost all of his money in a bank failure, Ansel and Marian returned to the Dominican Republic, where he practiced dentistry in Santo Domingo. His office was called the Paiewonsky Dental Clinic, and it remained in operation into the 1980s.

In the early 1930s, Rafael Trujillo took power as the dictator of the country. Trujillo, like many dictators in the 1930s, initially had broad support from the educated classes. Ansel became the director of the dental clinic at the University of Santo Domingo Dental School, a post which he held into the early 1940s. He modernized the clinic, importing the most up-to-date equipment from the United States. In the late 1930s, a number of his students were murdered for being opponents of the Trujillo regime. In 1938, Trujillo engineered a massacre of 30,000 Haitians. From that point on, Ansel was an opponent of the regime. Sometime in the early 1940s, he left the Santo Domingo City and returned to Puerto Plata.

In 1944, after receiving a warning that he was about to be assassinated, he and his wife Marian fled the country. They returned to St. Louis, where Marian died of cancer later that year. They had no children. He remarried in 1945 to his sister-in-law, Betty Price. They had two sons, Harvey, born in 1946, and Lester, born in 1950. Ansel remained in St. Louis practicing as a dentist with the Coleman Dental Clinic, where he worked until his death in 1975.

Transcript of Dr. Paiewonsky’s Address

Editor’s note—Dr. Paiewonsky opened his remarks with a brief review of the history of dentistry. This has been edited out to focus primarily on dentistry in the Dominican Republic. We have left in place the political jargon so often found in restrictive societies.

“What nerve!” That is perhaps what those of you who listen to me here tonight may think, when you watch me rise and address you to give a lecture in this room, which such notable scholars have honored with their eloquence; above all, when I have never been known as a scholar nor as a man well-versed in political and social questions, since you have never seen my name at the end of a literary or political article, or even at the end of a few bad verses, and you have only known me as one dedicated to everything concerning my profession. But, despite such truths, the field of dental studies is sufficiently broad, and is related to other areas of human knowledge which have contributed to the great progress dentistry has made, and I feel I will not lack words to express my thoughts to talk to you about the notable progress that dentistry has made in our country, especially in this era in which it has developed characteristics for which we have waited a long time. This is why I chose the theme of this dissertation: “The Progress and Social Impact of Dentistry in our Country.”

Fig. 1. Dr. Anselmo Paiewonsky
We don’t know by whom or how dental surgery was practiced on the island during the Colonial Period, but we must assume that here, as in the rest of the world, it was in the hands of doctors and some experienced practitioners.

When the first dental school in the world was established in the city of Baltimore in 1839, we found ourselves under the abominable Haitian domination, and this was not the propitious moment to think about forming a new school which would draw the world’s attention to it, or about organizing the dental profession, with even better reason, since the invaders had already closed existing professional schools. This was a moment of unrest in which we solemnly thought about expelling the invaders, in order to form an independent state.

The Republic was born on that memorable night in February 1844, and its first government was proclaimed. There then remained the difficult task of organizing the country and the new State, which was in terrible shape!

It’s not necessary to describe here the painful period that followed our Independence, in which the life of the new Republic was in a state of constant agitation and struggle, to justify the delay in introducing the study of dentistry into the Law of Studies, and in organizing this profession.

Nevertheless, we must say that the unfortunate politics of the men who had power during this period did not permit them to think of the future of the country, nor of the well-being of the Dominican people. They merely lived in a state of constant intrigue which, as a logical consequence, impeded the progress which had been initiated by the cry of Independence. Despite the fact that the Haitians had closed the University and other schools, the generations which grew up under their rule searched anxiously for a way to receive exposure to education and culture, which would let them feel like descendants of their ancestors. This was not in vain, because they discovered Archbishop Valera, and others, who opened the doors of their homes and became teachers of these generations, which had only known the pain of oppression. Since the Dominican people’s love of study and of knowledge had been preserved in this way, one of the first necessities of the new state was to open the closed schools, in order to mould the consciences of future generations, and to raise and consolidate the level of knowledge and culture of these generations.

Despite the political agitation of the epoch, it was necessary that the University reopen, and in the month of June in 1859, the ancient University of Santo Domingo was reopened by the “Law of the Consulting Senate,” Article 2, which said: “University teaching will be composed of four disciplines, for the present: 1) Philosophy; 2) Jurisprudence; 3) Medical Sciences; 4) Sacred Letters. The Faculty of Medical Sciences will be divided into three sections: the first Medicine, the second Surgery, and the third, Pharmacy.”

When professional studies were reestablished, after the interval in which the University of Santo Domingo remained closed, Dental Surgery was not included in the program of studies. It was therefore abandoned, as it had been previously, to doctors and audacious practitioners, who were perhaps ignorant of the danger to which they exposed their patients when they delivered themselves into their inexpert hands, to suffer extractions which might lead to death.

Once the sun of Independence shone again, after the gloomy night of Annexation to Spain, the Council of Secretaries of State charged with Executive Power, by the Decree of December 31, 1866, dictated a regulation for public education by which a Professional Institute was established in the Capital, which would be in charge of directing professional studies; these remained the same as those established by the Law of 1859. Dentistry remained outside this program of studies.

It is necessary to note that, although doctors continued to take the place of dentists, this duty was performed imperfectly, because doctors were limited to teeth extractions, and to trying this or that cure for mouth diseases. A slight pain was reason enough to extract the tooth; there was no other method of avoiding the pain, nor was it possible to eliminate cavities and put in the necessary fillings.

After the Dental School in Baltimore was founded, similar schools were established in Pennsylvania, St. Louis, New York and Chicago. They
were soon filled with a cosmopolitan student body which came with great interest, from diverse parts of the world, especially from American countries, to study the new profession in order to go out and exercise it everywhere, with the protection of a title that was proof of their efficiency and competence.

Until the year 1866, we have no knowledge of any Dental School graduate being in our country, nor of any Dominican who went to study Dentistry in North American schools because we did not have it in our own. But after this date, without being sure of the exact year, there were titled dentists of Cuban nationality in this capital: Doctors Sambrano and Zayas Bazan, who practiced for some time, and took on various young apprentices, who received practical training with these teachers: Goldon in La Vega, and Dr. Branchi, who was French, in Azua. This seems to have awakened the interest of various young people, who left their country and went to dentistry schools in the United States to pursue their studies. Around the year 1888, our graduates began to return: Doctors Julio Ernesto Lyon Santamaría, father, and his son Genaro Pérez, who practiced in this city, and in various towns of Cibao, respectively; and Alejandro Herrera and Diego Hurtado and Mota Ranché, in Puerto Plata. All of these had apprentices.

This is how dentistry was born in the Republic. Interest in the new profession spread and grew more and more each day, until the dentist became indispensable to everyone, and as a consequence, it was necessary to create the School of Dentistry, where new generations would receive indispensable knowledge, replacing those who were already in their later years.

The “General Law of Studies” decreed in June 1889, which went into effect after September 1, said in Article 20:

Professors of the Professional Institute are, for the present, those of the disciplines of Civil Law, Medicine and Surgery, Pharmacy and Mathematics. Courses necessary for the practice of the following will also be given: Notary; Dental Surgery and Obstetrics; and courses preparatory to the Bachelors of Letters and Sciences.

Article 29 of this law said that, “The study for the practice of Dental Surgery will be divided into three courses,” and in the second paragraph of the same article established that: “to obtain the academic title of Dental Surgeon, it is indispensable to have at least studied the requirements corresponding to the first training in a Central College, or in a School of Higher Learning of the Republic, or abroad.” The demand of such meager preparation for students of dental surgery indicates that it was held in low esteem, despite its importance, because if they have called the doctor the “guardian of health,” today we must put the dentist side by side with the doctor, and say, consequently, that the doctor and the dentist are the “guardians of health.”

There is even more. In Article 33 of the aforementioned law, it reads: “Those courses of Pharmacy, of Dental Surgery, and the branch of Obstetrics concerned with midwives, will, for the present, be added to the Faculty of Medicine.”

Although dental studies had been established and organized, they had been attached to medicine, if not in practice, at least in study, although very few professors of the Faculty of Medicine taught students of dental surgery. This was very ironic, because they had to come to one of our professional dentists when final exams were to be taken, so that the dentist could preside over the jury, at least regarding those materials pertaining to dental surgery and foreign to medicine. Who would teach these things to the students? How would they study them? How would the students be able to practice what they studied, something indispensable to this profession?

In the memoirs of Dr. Apolinar Tejera, Rector of the Professional Institute, regarding the academic year 1904-05, he urged that it was necessary to “separate Dentistry from the Faculty of Medicine and Surgery, since some of the studies included in this branch be entrusted specifically to dentists, due to their importance.” This suggestion was adopted by the Council of the Board of Directors of the Professional Institute, by Article 123 of the Law of Studies then in force, and on February 13, 1907, the first professor was appointed, who was the first graduate of Dentistry of the Institute, Dr. Alcibiades Ramírez Guerra, in 1900.
Until 1912, the Faculty of Dental Surgery functioned with only one professor; in February, 1912, the Executive Power named Doctors Diógenes Mieses Lajara and Julio Ernesto Lyon as professors of this Faculty. In this manner, they increased the total number of professors to three, which was sustained despite the fact that Dr. Lyon took a leave of absence in December, 1912, because Dr. Manuel de Jesús Pellerano was appointed to replace him. And this Faculty had a dental chair, a dentist’s office, and some instruments donated by the government of General Cáceres.

When the University of Santo Domingo was recreated from the former Professional Institute by the decree of the Provisional President of the Republic, Dr. Báez, the Faculty of Dental Surgery functioned in the same manner as it had previously.

In 1915, the four doctors who had been successively designated as professors remained, but the carelessness and abandonment was such that the professors attended classes when they felt like it, and most of the time they didn’t come, to the point where the students of the Faculty of Dental Surgery protested to the University on May 25, 1915, regarding the absence of professors from classes, endorsed by Raul Gautreau; M Espaillat B; José Bobadilla E; Ramón Hernández, son; Juan Ramírez and R. M. de Soto.

The unwelcome U.S. intervention that filled our history with shadows, brought us nothing aside from the fact that Dental Surgery in the U.S. as a profession, and the principal schools of Dentistry in the world flourished there. In this sad period, even though practical studies were reestablished which had previously been abandoned, (although since 1912, there was a shortage of instruments with which to practice), these studies were too deficient to be seriously considered as such.

During the period that followed the withdrawal of the despotic U.S. invader, until the year 1930, the field continued as before. However, it must be noted that the number of professors increased under the government of General Horacio Vasquez.

This was the state of Faculty of Dental Surgery until a young man became First Magistrate of the State. Within a few years, his hair had turned white, because, like the legendary king of Mauritania, who was condemned to carry the world on his shoulders, he had been condemned by the unanimous voice of the Dominican people to carry the enormous weight of the destiny of his country on his shoulders. However, if the former was condemned for inhospitality, the latter was condemned because, from the moment in which he accepted the responsibility which was placed in his hands, he gave all of his love to the Republic, and led his country along the path of peace and progress, organizing it completely, and raising it to the level of the most civilized countries of the world.

The sciences, arts and industries all progressed along new paths due to his powerful inspiration. His generous hand was constantly extended in all directions and his comforting words could be heard wherever pain appeared. How could the Dominican people not put all their faith and confidence in this man, under such circumstances? How could he possibly be distinguished from the destiny of the country, which he had made great? Today this country has given him a new sign of its gratitude.

Dentistry, like all fields of human knowledge, has received special attention from this genial man, whose sole desire and anxiety is for the happiness of his people, to whom he continually gives proof of the greatness of his love.

Fate willed that it not be necessary to mention the name of this extraordinary man for everyone to him, because the characteristic traits of General Dr. Rafael Leonidas Trujillo Molina became known to everyone. He showed his powers as a statesman in an impeccable manner when the terrible cyclone of September 3, 1930 destroyed the old city of “Colones,” and with it the poor equipment belonging to the Faculty of Dentistry. When the fury of the hurricane was scarcely over, hospitals had been organized to care for the injured, food was distributed to the poor, and clothes to the naked. This example was followed by everyone, among them the of the Faculty of Dental Surgery, who forewent their salaries for four hours per month in order to replace the lost instruments with new ones,
which were better than the former, and to increase the number of dental chairs from two to four. Thus, the professors cooperated with the Benefactor in the task of national reconstruction.

And this Faculty benefitted from his watchful eye with the appointment of Dr. José E. Aybar, who dedicated all his energy to giving new life to this Faculty, which had been in a state of sad abandonment. Dr. Aybar, a man of sharp intelligence, faithfully carried out the wishes of General Trujillo Molina. Following his example, he gave dental studies the necessary organization, so that they could produce better and more splendid fruits than had been seen before. Due to these glories, student enrollment increased by 66%.

Since 1930, dental surgery was accorded the importance it well deserved in our country. Today there is excellent equipment in various hospitals to attend patients there. Among these, Marión Hospital deserves mention, because they installed modern equipment to care for the National Army. This corresponded to the lively interest which General Trujillo showed for the health of the men in this honorable institution, who had the duty of preserving peace and our national integrity. The student population has a dental clinic in this city. Finally, the necessary measures have been taken to insure that all social classes can preserve their health through the use of unexcelled facilities. Among these measures was the of various dental clinics to serve the poor classes. It can be seen that the General never forgot for a single moment the ancient maxim, “A healthy body makes a healthy mind.”

The Faculty of Dental Surgery has contributed, and now contributes efficiently, to the task of social improvement. Today the practice of the students is an effective reality, since it is directed and watched constantly by special professors. Many poor souls come to the clinic every day, seeking relief from the dental problems bothering them, if they cannot extract the injured teeth themselves, nor cure themselves of diseases which neither filling cavities nor the cure of any other sickness can eliminate, and there they find a cure for whatever may be the dental problem bothering them.

As proof of this, we will describe the work done in the Operating Clinic and the Laboratory of Dental Prosthesis in our University during the academic years 1939-40 (Table 1).

In addition, numerous oral surgical operations were performed by Dr. Horacio Read, Dean of the Faculty, in the corresponding room.

The Faculty of Dental Surgery is currently producing competent professionals who are performing excellent work all over the country, due to the sacrifices made by the Faculty in its organization and improvement. It has also cooperated in the task of national reconstruction, with its fine work to improve living conditions for the poorer social classes.

The equipment used by the Faculty until the year 1940-41 was inadequate for the increased number of students enrolled today, and for the number of poor people who came to seek relief from their pain. However, thanks to the Benefactor of the country, a new facility was opened in the academic year 1941-42, where the Faculty of Dental Surgery could subsequently operate. This was necessary, not because of the number of students enrolled, but mainly because the equipment which they had just installed didn’t fit in the classrooms assigned to them in the main building of this University. We don't need to talk further about this modern and unexcelled equipment, donated by the Benefactor of the country. It is sufficient to say that with this

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<td>Prophylaxis</td>
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<td>219</td>
</tr>
<tr>
<td>Extractions</td>
<td>369</td>
<td>1891</td>
</tr>
<tr>
<td>Root treatments</td>
<td>54</td>
<td>69</td>
</tr>
<tr>
<td><strong>Prosthetic restorations:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridges</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>Crowns</td>
<td>20</td>
<td>56</td>
</tr>
<tr>
<td>Upper and lower prosthesis</td>
<td>14</td>
<td>61</td>
</tr>
</tbody>
</table>

Table 1.
equipment, our Faculty has been raised to a school of highest quality, among the many in this world which share in this branch of human knowledge. There could not be a better tribute to this fact than what your consciences will tell you after you see the film which we will show in a few minutes.

In this era, the profession of dental surgery has been raised to the level of dignity which it deserves. Today it is necessary to complete the B.A. program in Physical and Natural Sciences before enrolling as a student in the Faculty. The scorn which this profession was viewed until recently made it sufficient to have only a basic preparation, in addition to higher studies.

Thus, the University of Santo Domingo, its professors, alumnae; and especially the Faculty of Dental Surgery with its body of professors and students; professionals in general, and dentists in particular; as well as all the Dominican people, owe another debt of gratitude to General Trujillo.

Conclusion

Despite the fact that he was an American citizen, Paiewonsky lived as if he were in exile from his home country; because from 1944 until 1961, when Trujillo was assassinated, he was unable to return to the Dominican Republic where his brothers and their families lived. In fact, he did not return until 1974, when he was greeted warmly by many former patients, students and colleagues.

Although he did not teach dentistry in the United States, he was a teacher in another sense: As expressed by his son, Lester Pines, Anselmo Paiewonsky had experienced life both in a democracy and under a dictatorship. He conveyed to his children the fact that freedom, particularly the freedom of speech, is precious; that they must have the courage of their convictions and should never fear to express and defend them. Paiewonsky’s character, even more than his work in modernizing the dental clinic at the University of Santo Domingo, is his legacy.
Presentations held at the Bernhard Gottlieb Dental School of the Medical University of Vienna (Bernhard Gottlieb Universitätszahnklinik GesmbH)

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David A. Chernin, DMD, MLS

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Dr. Moriz Heider: Founder of the Austrian Dental Society and His American Relationship
Johannes Kirchner, MD, DMD

The Numbers Game: The International History of Tooth Numbering Systems
Sheldon Peck, DDS, MScD

Bernhard Gottlieb’s Impact on Contemporary Endodontology
James L. Gutmann, DDS, Cert Endo, PhD, FACD, FICD, FADI

How Two German-American Professors “Revolutionized” General Anesthesia During the World’s Columbian Exposition
George S. Bause, MD, MPH

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double superior room
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Includes: buffet breakfast, all surcharges and taxes, free Wi-Fi, and use of relaxing common area.

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The formal training of oral and maxillofacial surgeons in Colombia started in 1958 at Hospital San José, thanks to the titanic work of Waldemar Wilhelm, a German-born surgeon who settled in Bogotá in 1950. Today there are seven institutions in Colombia that offer residency programs in oral and maxillofacial surgery. The aim of this article is to describe the history of the Oral and Maxillofacial Surgery Residency Program at Universidad El Bosque in Bogotá.

Introduction

In 1977, twenty-five Colombian medical doctors met in Bogotá with the purpose of organizing an institution that would help solve the problem created by the critical financial situation facing Colombian public hospitals at the end of the decade. The meeting concluded with the foundation of a medical center named Clínica El Bosque; and with the organization of a new university, Escuela Colombiana de Medicina (ECM), today known as Universidad El Bosque. The ECM was authorized to function on July 27, 1978, by the Instituto Colombiano para el Fomento de la Educación Superior (ICFES), the government institution which regulates higher education in Colombia.

ECM began as a medical school, but the idea of a dental school had been in the founders’ minds since the very beginning. It took them four years not only to develop the curriculum and construct appropriate facilities, but also to recruit Bogotá’s most respected clinicians, researchers, epidemiologists and leaders. In 1983, when the dental school finally opened its doors, they appointed Colombia’s first female oral and maxillofacial surgeon, Dr. Eugenia Gutiérrez, as head of the Oral and Maxillofacial Surgery Department.

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History of the Residency Program

In the late 1970’s, Colombian dental academics initiated a debate regarding which dental specialties were appropriate in the country, and which way these specialties should be organized and taught. There were two main approaches: the Bogotá-based thinkers believed in independent specialties (e.g., orthodontics, periodontology, endodontics). The Medellín intellectuals at Universidad de Antioquia Dental School, on the other hand, believed in integrality, a concept by which dental specialties are not independent, but integrated according to age groups: Children’s Integral Dentistry, Adolescents’ Integral Dentistry and Adults’ Integral Dentistry. The debate included all fields, except oral and maxillofacial surgery, which both groups agreed had to be taught independently and hospital-based.

Discussion at ECM continued soon after its first dental class graduated in 1987, regarding the different dental specialty programs that it should offer, giving priority to the oral and maxillofacial surgery program. Dr. Ramsés Hakim, then Dean of the Dental School, created an Advisory Committee that had the special mission of working on a feasibility study. This Committee worked under the enthusiastic leadership of Dr. Luis Alberto Campos (Fig. 1) perhaps the most active Colombian oral and maxillofacial surgeon at the end of the 20th century. Dr. Campos lectured on maxillofacial surgery all over the country, wrote numerous papers for national and international journals, served three times as President of the Asociación Colombiana de Cirugía Oral y Maxilofacial (ACCOMF), and most importantly, founded several oral and maxillofacial surgery departments in Bogotá, among them those at Hospital La Misericordia, Hospital San Juan de Dios, Clínica San Pedro Claver and Hospital Universitario Clínica San Rafael. Dr. Campos’ former resident, Dr. Eugenia Gutiérrez (Fig. 2) served as Advisory Committee coordinator.

Despite the fact that formal training of oral and maxillofacial surgeons in Colombia had started in 1958 at Hospital San José with German maxillofacial surgeon Waldemar Wilhelm (Fig. 3), himself a former resident of Dr. Karl Schuchardt and today regarded as the father of oral and maxillofacial surgery in Colombia, the feasibility study concluded that the country urgently needed to increase the number of active oral and maxillofacial surgeons. The Advisory Committee developed a draft that included the program’s philosophy, duration, occupational profile, subjects, hospital rotations, and all the major and minor competencies an oral and maxillofacial surgeon should possess.

Upon finishing the study, a final dossier was elaborated by Drs. Luis Alberto Campos, Eugenia Gutiérrez and Inés Tavera. It was approved by the University Council, thus giving birth to the Oral and Maxillofacial Surgery Residency Program, which was created by Resolution #0755 dated May 23rd, 1990. After careful evaluation by ICFES, permission was granted to start a fully-accredited four-year training program based at Clínica El Bosque and affiliated hospitals, e.g., Instituto Nacional de Cancerología, Hospital Santa Clara, Clínica San Pedro Claver, Clínica Colsubsidio, Hospital Universitario Clínica San Rafael, Hospital El Tunal, Clínica Shaio and Hospital Simón Bolívar.

Fig. 1. Dr. Luis Alberto Campos

Fig. 2. Dr. Eugenia Gutiérrez

Fig. 3. Dr. Waldemar Wilhelm
The Oral and Maxillofacial Surgery Residency program at Universidad El Bosque initiated in July 1991 with Dr. Campos as director, Dr. Gutiérrez as coordinator, and six residents: Andrés Powells, Lucero Estrada, Germán Gómez, Darío Garzón, Carlos Villegas and Jorge Rincón. Agreements were made with US institutions like Healing the Children and Health Volunteers Overseas, allowing student interchanges. Seven residents traveled to the US and, at the same time, ECM received residents and surgeons, among them Dr. Mackintosh, Dr. Makena and Dr. Larry Herman.4

Dr. Luis Alberto Campos, an intellectual with exceptional moral values, remained director until 1999, when health problems forced him to move to Barranquilla, a city located in Northern Colombia, where he died on July 11, 1999. Dr. Eugenia Gutiérrez was appointed program director in 1999, remaining in charge until 2002, when she retired from active service at Clínica San Pedro Claver (today known as Clínica Méderi). Still playing a vital role in the program as a full-time faculty and surgical instructor at Clínica El Bosque, Dr. Gutiérrez herself recruited the third program director, 2000-2002 ACCOMF President Dr. Humberto Fernández (Fig. 4), who since then has been in command of the program in conjunction with Dr. Carlos Ruiz-Valero (Fig. 5), who serves as program coordinator.2

Dr. Ruiz-Valero, Head of the Division of Oral and Maxillofacial Surgery at Hospital Universitario Clínica San Rafael, received his DDS degree from Universidad Javeriana and completed his four-year surgical training in 1991 under the tutelage of Dr. Rafael Ruiz at Universidad Nacional Autónoma de México in Mexico City. Dr. Ruiz-Valero is heavily involved in research, particularly in the surgical correction of TMJ disorders. Dr. Humberto Fernández graduated from Colegio Odontológico Colombiano in 1987 and completed his oral and maxillofacial surgery training at Universidad del Salvador/Hospital Francés in Buenos Aires, Argentina in 1993 under the tutelage of Argentinean masters José Yoel, Marcos Ratinoff and José Luis Ferrería. Upon returning to Colombia, he settled in Bogotá and joined the Oral and Maxillofacial Surgery Department at Clínica San Pedro Claver, where he met Dr. Eugenia Gutiérrez. Later he became Head of the Cranio-Maxillofacial Surgery Department at Hospital Simón Bolívar. An unquestionable natural leader, Dr. Fernandez's expertise in the surgical treatment of diseased salivary glands, cranio-maxillofacial deformities and head and neck surgery is well known across Colombia and Latin America.2 Currently he serves as head of the Oral and Maxillofacial Surgery Division at Clínica El Bosque.

**Universidad El Bosque OMS Today**

Dr. Fernandez’s vision of the Oral and Maxillofacial Surgery Residency Program at Universidad El Bosque, and philosophy of what a surgeon must be—both inside and outside the operating room—has raised the reputation of the program nationally and internationally. Residents are given the opportunity to rotate in countries such as the US, Spain, Mexico, Argentina, Venezuela and Honduras. Within Colombia, they spend at least three months in Barranquilla at Someca, a nationally-recognized institution for the treatment of oral and maxillofacial pathologies. In Barranquilla they work with surgeons Saulo Pineda (Universidad Javeriana, Bogotá, Colombia, 1994), Hernán Arango (Universidad Nacional Autónoma de México, Mexico City, Mexico, 2002) and Nadim Elneser (Hospital Santa Casa de Misericórdia, Piracicaba, Brazil, 2004). With an average of five residents per year, the program currently trains students from...
Venezuela, Mexico, Aruba, Costa Rica, El Salvador, Honduras, Guatemala and Colombia. In recent years, both professors and residents have enriched the oral and maxillofacial surgery literature with articles published in Spanish and English. These articles have appeared in such periodicals as Revista Colombiana de Cirugía Oral y Maxilofacial, the British Journal of Oral and Maxillofacial Surgery, International Journal of Oral and Maxillofacial Surgery, and the Journal of Oral and Maxillofacial Surgery.

Acknowledgments

I would like to thank Drs. Jaime Alberto Ruiz, Eugenia Gutiérrez, Humberto Fernández, Carlos Ruiz-Valero and Arthur Vallejo at Universidad El Bosque for their assistance in the preparation of this paper. Many thanks to my masters Mrs. Kathryn Pope, David Tripp and Rosa Garza-Mourino at Antioch University Bridge Program, Los Angeles, CA.

References


Theodore P. Croll, DDS
& Ben Z. Swanson, Jr., DDS, MPhil

Dental surgeon and physician C.A. Du Bouchet gave an excellent summary of how teething was viewed in the mid-19th century in his book, *The Family Dentist,* A portion of Dr. Du Bouchet’s chapter on “Infantile Diseases From Teething” is reproduced here:

The period of teething is one of pain and danger to the child, and of care and anxiety to the mother; for though in favourable cases, the symptoms are slightly marked, and limited to swelling and redness of the gums, increased flow of saliva, and slight affection of the bowels, yet it frequently happens that dentition is accompanied by signs of great constitutional derangement.

Teething usually commences about the third or fourth month, and is marked by increased flow of saliva, the infant having a tendency to put everything (sic) within its reach into its mouth. After this state has continued a longer or shorter period, varying from six to twelve weeks, the symptoms become more severe; the gums swell, are inflamed and painful, so that the child does not willingly allow them to be touched; nay, sometimes refuses the breast.

In bad cases, symptoms of constitutional irritation now commence; the breathing becomes hurried and oppressed; the pulse quick and irregular, and the urine scanty and high coloured; delirium may come on, and in many cases violent, and even fatal convulsions may take place.

A myriad of teething remedies were offered by 19th-century purveyors of quack medicines. Claims of pain relief were made for virtually all of the products and other purported miracles of relief were common such as diarrhea cure, softening of the gums, regulating the bowels, colic and dysentery cures and even prevention of death. Dr. Moffett’s Teethina Teething Powders not only claimed to remove and prevent worms, but it “Will Make Baby Fat As A Pig.” How would that marketing suggestion register with today’s discriminating parents?

Before the Pure Food and Drug Act of 1906, many teething products actually were quite effective for pain relief—because they contained such substances as ethyl alcohol, cocaine, heroin, and morphine. While these concoctions were undoubtedly soothing, some children actually died of narcotic or alcohol overdose. Mrs. Winslow’s Soothing Syrup was found to contain “5 per cent. Alcohol and one-tenth grain of morphin sulphate to each fluid ounce together with oil of aniseed, caraway, coriander, jalap, senna and sugar syrup.”

The formula was altered after the government fined the manufacturer $100 in 1916.

In 1838, Burdell and Burdell suggested a physical means of relieving teething discomfort. They noted that “the uneasiness of the child is found to be relieved by pressure against the gums with a hard substance. For this purpose a ring of ivory, or coral, or gold, is employed; the latest invention is a ring of gum elastic, or India rubber, which answers a very good purpose.” It is astonishing that our modern methods of relief for teething children, such teething rings or frozen bagel segments, are so similar to those of 174 years ago.

The cards pictured here represent a small sampling of Victorian Era teething relief products. The card at the opposite far right is a pre-made “chromo” (colored trade card) that was chosen to advertise a French clothing store, not a dental product or service. The stock image however, depicts a child suffering teething pain from the first tooth (“La Premiere Dent”).

**Cramp AJ. *Nostrums And Quackery, Volume II.* AMA Press, Chicago. 1921. pg. 628.

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A Victorian-Era Teething Exposé

continued on following pages...
Dental Trade Cards XXXVI

PIKE'S TOOTHACHE DROPS
Instantly Relieve the Worst Cases of Toothache.

This excellent and inexpensive article will annihilate in one minute the most violent and prostrated toothache. No sooner does the pain destroying drop touch the agonized nerve that the throbbing ceases and the sufferer enjoys unspeakable relief.

PIKE'S TOOTHACHE DROPS are also a prompt and efficient remedy for swollen and ulcerated gums. They are especially useful for teething children; when rubbed upon the gums, they greatly relieve the pain caused by cutting the teeth. They also cure nervous toothache when rubbed behind the sufferer's ear.

The drops contain nothing which can irritate the gums or inflame the inside of the mouth, while their remarkable cheapness places within everybody's reach a certain and speedy cure for the most common and at the same time one of the most agonizing of human complaints.

Sold by druggists everywhere at 25c.
C. M. CRITTENDEN, Prop't, New York.

Mrs. Winslow's Soothing Syrup
FOR CHILDREN TEETHING, CURES WIND COLIC & DIARRHEA.

Mrs. Winslow's Soothing Syrup
FOR CHILDREN TEETHING,
ADVICE TO MOTHERS.
MRS. Winslow’s Soothing Syrup should always be used for Children Teething. It soothes the Child, Softens the Guns, Allays all Pain, Cures Wind Colic, and is the Best Remedy for Diarrhea.
Twenty-Five Cents a Bottle.

Nath für Mütter.
Mrs. Winslow’s Soothing Syrup sollte stets beim Jagen der Kinder gebrannt werden. Er beruhigt das Kind, macht das Zahnfleisch weich, entfernt alle Schmerzen, lindert Windel und ist das beste Mittel gegen Durchfall.
Künstlichzüngig Cents die Flasche.

CONSEIL POUR LES MÈRES.
Le Sirop Calmant de Madame Winslow devrait être toujours employé lors de la dentition des Enfants. Ce Sirop calme les enfants, enlève les douleurs, guérit les coliques, et est le meilleur remède pour la diarrhée.
Vingt-cinq cents la bouteille.
This 3.5” x 5.75” color lithographic postcard, postmarked July 22, 1905, was produced in the US by an unknown company during the Post Card Era (1901-1907). It illustrates one man’s futile efforts to quell the pain of an agonizing toothache. Sent to Dr. C. O. Stuttle, Staunton, Illinois, it contains on its face the imprinted message: “A swell time.” This play on words was personalized with the writer’s added communiqué, to become: “A swell time I am having, Q.” Below this message, the sender has also inscribed, “July 22, 1905—Green Bay, Wis.”

A green one-cent Franklin stamp (Scott #A115), first issued in 1902-1903, is affixed to the address side. On the lower left corner, an official reminder reads, “This side is exclusively for the address.” (Private messages were not yet allowed to be written across from it). US postal regulations issued in 1901 stipulated that the words “Post Card” were required to be printed at the upper address side on cards which were privately produced, while “Postal Card” was to appear in the same location on those which were government-issued.

During this era, postcard scenes of toothache sufferers were not uncommon. In this portrayal, a miserable-looking middle-aged man, deep in the throes of his oral discomfort, sprawls uneasily in an armchair. This poor soul’s teeth are truly set on edge! A filmy, curtained window in the right rear background borders a restful outdoor garden scene, while a potted plant sits to the left on the sill. (Oh, that nature’s abundant tranquility could now be his!) The blue patterned and wood-paneled wall behind him, and curtained doorway to his right, complete the interior. Slouched in his green overstuffed chair, the afflicted man is deeply burrowed into his agony. His right foot, clad in an orange sock and a well-worn brown shoe, is stiffly propped up on a small wooden chair; while his left foot has just bumped a pitcher of water, which now falls precipitously forward and spills its icy contents onto the patterned fringed rug.

To deal with his dental ailment, he seeks downy comfort: a great variety of throw pillows support and cushion him. In the foreground, a shiny spittoon is strategically placed to receive anything which might catapult its way. A metal pail, labeled “fire only,” also sits ready for action. It may be intended to douse a fire started by a dying cigar, since a small bowl containing a few fresh stogies sits at the back of a table to the viewer’s right. The fire bucket may also be at the ready for another potential hazard: balanced precariously over the table’s edge is a “punk,” a device used for lighting tobacco products and other inflammmables. Resembling a stick of incense, it contains a core of bamboo surrounded by a brown coating of compressed sawdust.

Perhaps the carbonated water in the dispenser on the table will be used to wash down a spoonful of unidentified medicine from the diminutive bottle on the right. However, as evidenced by his grossly swollen, abscessed face, the man’s efforts to make do by relying on these skimpy remedies and his “toothache towel” have done little to allay his suffering. Will he soon finally “throw in the towel,” and make haste to a dentist?

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BULLETIN OF THE HISTORY OF DENTISTRY

official monthly publication of
American Academy of the History of Dentistry

MEDICAL PRACTICE IN ILLINOIS
¶/ The Illinois State Medical Society has published (1955) Vol. 2 of History of Medical Practice in Illinois, dealing with the period from 1850-1900. The editor is the late David J. Davis, and the chapters on various phases of medical and surgical practice are by different authors. Chapter XVI "Plastic and Reconstructive Surgery" by Frederick W. Merrifield and Walter W. Dalitsch will appeal to the oral surgeon. Volume 1 of the work, covering the period to 1850, edited by Lucius H. Zeuch, was published in 1927.

HALF CENTURY CELEBRATION OF MONMOUTH COUNTY
¶/ The October 1955 issue of the Bulletin of the Monmouth County (New Jersey) Dental Society is devoted to the fiftieth anniversary celebration of that organization. The Bulletin contains a historical sketch of the Society. Among the biographies given is that of the dental historian Bernhard Wolf Weinberger, who as principal speaker on the anniversary program, October 7, 1955, addressed the Society on "Organized Dentistry: Its Achievements."

DENTAL SERVICE OF THE ARMY IN WORLD WAR II.
¶/ The Medical Department of the United States Army has published (1955) United States Army Dental Service in World War II by George F. Jeffcott, Col. DC USA. This work of 362 pages deals with all aspects and activities of the Dental Corps, to some extent before 1941 and throughout the war until 1947.

THE EARLIEST GERMAN DENTAL CLINIC
¶/ An account of the private clinic of Heinrich Albrecht, in Berlin, the first in Germany, is given by Karl Frz. Hoffmann in Zahnärztliche Praxis 6:12 September 15, 1955, under the title "Bilder aus einer Zahnklinik vor 100 Jahren." Albrecht published in 1862, Klinik der Mundkrankheiten Erster Bericht 1855-1860. During that period, the clinic served 9350 patients. The opinions of patients with regard to their treatment were included.

FIRST DENTAL JOURNAL IN CUBA
¶/ Dr. Erastus Wilson, a dentist from the United States, issued the first dental journal in Cuba. This claim is substantiated in an article by Cesar Mena Serra, entitled "La Primera Revista Dental de Cuba," in Protesia Clinica 16:3-4 August, 1955. The Journal was Revista Medico-Quirurgica y
Dentistica, founded in 1868. No copy of the journal appears to be available and the duration of its publication is unknown. The editor and publisher, Erastus Wilson, whose portrait is reproduced in the article, was a scientific-minded man who had written several articles for the American dental press, and at one time (1859) was on the faculty of the New York Preparatory School of Medicine. The journal is perhaps the earliest in Latin-America.

ODONTOIATRIC INSTITUTE OF THE UNIVERSITY OF PAVIA

A comprehensive account of the work of the Odontoiatric Institute of the University of Pavia with exhaustive bibliography from the years 1924-1955 ("Attivita scientifica e didattica svolta dall' Istituto di Odontoiatria dell' Universita degli studi di Pavia nel trentennio dall' anno accademico 1924-1925 al 1954-1955") is given in Rassegna Trimestrale di Odontoiatria 36:163-257 July-September, 1955.

HOW OLD IS THE TOOTHBRUSH?

An article by Hansjörg Kötzhke in Zahnärztliche Praxis (6:12 Oct. 15, 1955) entitled "Wie alt ist die Zahnburse?" contributes to a question previously discussed in the Bulletin. This author ascribes the earliest mention of a toothbrush in Germany to Cornelius van Soolingen in 1676.

TREATMENT OF PULP DISEASE

In a small book (1953) entitled Die Behandlung der Pulpakrankheiten jetzt und jetzt (The Treatment of Pulp Diseases Then and Now), Dr. Ernst Kraus devotes pages 11 to 74 to an account of the conservative treatment resources for the pulp from 1756 to date.

JOHN RANKIN BROWNIE

For the 28th in her series, "Personalities of the Past" Lilian Lindsay has chosen John Rankin Brownlie (British D. J. 99:236 Oct. 4, 1955)

DANISH BIBLIOGRAPHY OF EARLY DENTAL WORKS


Items for publication in the Bulletin should be addressed to G. B. Denton, American Dental Association, 222 E. Superior St., Chicago 11, Ill.
THE EARLIEST DENTAL JOURNAL IN CUBA

The notice in the Bulletin of Dr. Cesar Mena Sara's article on the first dental journal in Cuba has elicited further valuable information, as was the case in earlier discussions of the tooth brush and porcelain teeth in America. With reference to Revista Medico-Quirurgica y Dentistica, it was conjectured: "No copy of the journal appears to be available and the duration of its publication is unknown."

A letter from Margaret Gayley Palmer, librarian at the University of Pennsylvania School of Dentistry, includes this passage: "We have, in this library, Abril, 1868 and Julio, 1868, #1 and 2, of that publication. A note typed on the catalog card states that it 'ended with No. 3, Oct. 1868.' This volume came to us from Dr. Kirk, his gift at the time the Dental School moved up to the Evans Institute building in 1915 (or 1916). The first cover of each issue has been bound into the volume, and four pages of advertising at the end of #2. #1 consists of 112 pages, and also #2, paged consecutively."

The Bulletin should be an excellent medium for the solution of specific problems, the exchange of information, and the pooling of historical knowledge.

HISTORY OF DENTISTRY IN COLONIAL CUBA

Dr. Mena, mentioned in the preceding article, is the author of a historical work, La Odontologia en Cuba Colonial (Havana, 1955) covering the period from the 16th century through the 19th. This work of 248 pages is divided into thirteen chapters, the first seven of which trace the history of dentistry in Cuba under the Spanish chronologically, and the last six chapters deal with special aspects of the dental development as follows: ch. 8, private colleges and schools; ch. 9, the official educational program; ch. 10, scientific dental societies; ch. 11, dental books; ch. 12, dental journals; ch. 13, other developments to the end of the century.

The work has 21 illustrations including facsimiles of diplomas, official acts, and title pages. The documentation is extensive, and the bibliography contains 88 items.

Edward E. Haverstick, a member of the A.A.H.D., died November 26 at the age of 82. He was author of the History of Dentistry in Missouri, 1938.
DEMISE OF AUSTRALIAN JOURNAL OF DENTISTRY

With the December 1955 issue, the Australian Journal of Dentistry ceases publication in order to allow the Australian Dental Journal (representing the national organization of the profession) to take over. The Journal of Dentistry is the second oldest dental journal of the British Commonwealth, having been established in 1897 by the Melbourne Dental Hospital and Australian College of Dentistry. A historical comment appeared in an editorial in the August issue of the Australian Journal of Dentistry (59:240-241).

THE STATUS OF THE EIGHTEENTH CENTURY DENTIST

A work that has not been greatly employed in determining relations between dentists and the practitioners of the healing arts in the eighteenth century is Jean Verdier's Jurisprudence of Medicine in France, or Treatise Historical and Judicial, Vol. 1, 1762; Vol. 2, (?). Two excerpts from this work, in translation, give an interesting legal view: "These, in short, are the functions attached to the profession of physicians. To them in consequence, as masters of the art of healing, belongs the use of all the means pertaining to the health; or if they wish to look forward to a greater perfection, to them belongs the right to reserve to themselves the direction of the artists who afford them the means, that is to say the surgeons, apothecaries, obstetricians, midwives, herniotorists, oculists, restaurant keepers (?), dentists, chemists, botanists, druggists, everybody, in a word, who is capable of furnishing the aims which they employ to preserve and restore the health—all the agents of medicine—all of which is deduced from the nature of the art, which can not be curtailed in the functions belonging to physicians without destroying their profession; and reciprocally, the agents of medicine cannot leave their sphere substituting themselves for the physicians." (Verdier, Vol. 1, p. 310-311)

"...we conclude then that if the physicians, the primary masters of surgery and pharmacy, have abandoned them (these arts) voluntarily to the practice of outsiders, they can take back the functions when it seems desirable to them. Their right with regard to these two arts is the same as that of the surgeons and apothecaries with regard to the arts which they have abandoned to special artists—the herniotorists, the oculists, the restaurant keepers (?), the dentists, the midwives, the chemists, the distillers, the druggists, the grocers, and the herborists. If the surgeons and the apothecaries are not deprived of these parts of their art by having relinquished them to practicing specialists, can they by the same reason demand professional privilege to the exclusion of the physicians with whom they compete?" (Verdier, Vol. 1, p. 315-317)
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by Dr. Hans Sachs
Translated by Anna C. Souchuk, PhD
Published by Steven Potashnick, DDS
Soft cover, 51 pages, 86 illustrations

There have been a number of English language articles about the toothpick, J. Menzies Campbell’s 1952 paper (Campbell JM. Toothpicks and toothbrushes. Dent Items of Interest. 1952;74: 295-305.) is of particular note. However, Der Zahnstocher und Seine Geschichte eine kulturgeschichtlich-kunstgerbliche studie (The Toothpick and its History: A cultural-historical and arts and crafts study) remains the premier reference resource. We must congratulate Dr. Potashnick for the time, effort and cost in providing this English translation.

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by Gerald Shklar, DDS, MS
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By Arden G. Christen and Peter M. Pronych

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$79
Use the search function where the subject, title, first author (Hyson), Stock Number (008-023-00137-5) or ISBN (9780160821592) can be entered to locate the book. PDF file version will be available for download by May 2009 at the publisher’s website (The Borden Institute). http://www.bordeninstitute.army.mil
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