Imagine for a moment a universal language: translatable to color, melody, writing, touch, hand signals, and endless strings of numbers.

Imagine now that this language was taught from birth to be second nature to every speaker, no matter what their primary language. The world would become saturated with hidden meanings. Music would be transformed, with all the instruments in the orchestra at an opera engaged in simultaneous dialogue: cellos darkly muttering melancholy comments about the protagonist while the French horns wonder aloud about the unlikely plot, and oboes informing the audience of a sponsor's prix fixe menu. People could, through hand signals, hold conversations across the balcony seats, allowing them to silently critique the contralto.

The rise and fall of voice in a conversation could carry a subtext, with the internal melody of speech expressing an entirely opposite or hidden sentiment. Skilled speakers could employ a sort of musical counterpoint to their words, with meanings running in parallel, or in contrast, and commenting parenthetically upon their own words even as they uttered them.

Textiles would be elaborate documents, actual texts again. The variegated strands of color in curtains, rugs, and dresses would reveal, upon inspection, entire hidden passages of literature. Numbers would become a language in and of themselves, whether through telegraphic taps or through details as mundane as the pattern of nails across floorboards, rivets in beams, or the arrangement of phone numbers—all would hold a thought frozen within them.

MANY ATTEMPTS TO radically change language are inside jobs. After all, when we reach for our Webster's Dictionary, we may not realize that we are grabbing a piece of linguistic propaganda. Webster's is little more than a reference work today, but it was not always such. Noah Webster wrote with an explicit theological intention in mind, for he traced back the proliferation of human languages to Babel. The point of the dictionary maker was not to record language as it was used, but to direct language to how it should be—to simplify it, to return toward the Edenic universal tongue in which man, beast, and God could converse freely.

Yet even our greatest lexicographer's effort met with only modest success. True, he changed "theatre" to the more sensible "theater," but he never persuaded the American public to spell "bread" as "bred," or "give" as "giv." It was not for lack of trying—at one point Webster even published his own translation of the Bible, rendered

in his own phonetic spellings. It went over about as well as a Bible in Ebonics might today. People were not prepared to dispense with their maddeningly illogical native tongues. Anything more than incremental change could come only from the creation of an entirely new universal language—a massive project that no human could undertake in one lifetime.

But an ocean away, even as Webster wrote his tomes, Jean Francois Sudre did just that. Born in the village of Albi in 1787, Sudre attended the Paris Conservatory and became a music instructor in Soreze. In his early years he developed a "simultaneous method of teaching music," no trace of which remains today, although one 1819 newspaper article marveled at its brilliance. Around this time, Sudre was walking down a street when he chanced across a five-year-old boy standing by a water wagon, scraping away at a fiddle with remarkable intonation.

"Give me your violin," Sudre demanded.

The child handed it over. The teacher proceeded, rather cruelly, to turn the pegs until the violin was hopelessly out of tune, and then handed it back. The little child then methodically turned one peg after another—without so much as a tuning fork—until the instrument was back in perfect tune. Sudre asked how he'd learned to tune the instrument.

"By myself."

Sudre looked to the boy's mother, who was sitting nearby: "Madame, if this child were mine, in five or six years he'd be my fortune!"

It was to be that long before the prodigy, Ernest Deldevez, and the music professor would meet again.

SUDRE MOVED TO Paris in 1822. But at least five years before, he had turned his attentions from music lessons to the ambitious notion of developing a universal language comprised of music. The first breakthrough came in Paris, where one day he rapidly sketched out a system of transposing letters to different musical notes; it was not so much an independent musical language as a code for transmitting existing languages.

Unsure of whether his system would work, he sequestered one of his music students. After fifteen lessons, the two were holding conversations across Sudre's apartment on Rue Dauphine—Sudre asking questions while strolling about his bedroom with a violin, and his student responding from a piano in the living room. Neighbors were mystified by the atonal call-and-response that went on for hours behind Sudre's doors.

Sudre showed off his system to friends visiting his chambers, some of whom were

journalists, and by late 1823, Parisians began to hear of this strange man and his even stranger invention, the Langue Musicale. The next year Sudre tracked down the man he thought best for the job of disseminating his invention—someone not yet a man at all, actually, but a boy he had heard in the streets of Soreze years before.

Sudre spent 1824 with his two young prodigies, Ernest Deldevez and Charles Lasonneur, drilling them in playing and listening to his musical alphabet. The trio toured France the following year, with the two children fighting each other onstage to answer queries from Sudre's violin.

To bolster this tour, Sudre privately published a six-franc tract, Langue Musicale au moyen de laqnelle on pent converser sur tous les instruments. In it, he envisions a future in which his new language will become the new standard of shorthand stenography and a boon to long-distance communication as well, since the signal could travel "up to 700 or 800 feet with a horn, oboe, flute, or clarinet." It also contained the first of many improvements by Sudre: hand signals for each of the notes, so that the deaf could communicate. What had started out as a language of sound had now also become a soundless language—and Sudre had begun his long trek toward the dream of a truly universal system of signs.

The first real hurdle for his new invention did not come until 1827, when Sudre was invited to demonstrate it to the Institut de France. With skills honed by several years of touring and practice, Sudre and Deldevez amazed the scholars with quick musical communication of sentences in French, Latin, and Greek. Within a year a commission appointed by the institute released a report lauding the Musical Language. But the greatest potential use of the Musical Language, in the commission's view, was not so much for communicating with our brothers as for slaughtering them—"Especially in the art of war, the use of this language could be very useful to serve as a night telegraph." Sudre forwarded a copy of the commission's findings to the Minister of War, and was rewarded with an invitation to demonstrate his language before an audience of generals.

But a problem emerged: a military clarion can produce only four pitches, not the twelve that his language relied on. Sudre spent the next two years ratcheting his language down to just four notes. He also had a new name for it: the Telephonic

Trials of the Telephonie were held on two hilltops in December 1829, with clarions accurately relaying such cheerful messages as You will destroy the bridge at 6 a.m. The officers were impressed by the inventor's tenacity, but in their subsequent report conceded that the Telephonie would be "only very rarely useful." Still, Sudre continued refining and reinventing his musical alphabet. Over the next several years he peddled variations of it to the Institut de France as a language for the blind, the deaf, and the mute. Another commission was convened, and Sudre received polite encouragement—but no money.

And, once again, the panel concluded that the best use for Sudre's miraculous gift of language to the disabled would be on the battlefield.

Sudre kept trying. He even demonstrated that he could teach the basics of the language in just forty-five minutes. But the problem, as repeated reports stressed, was that no instrument could project a sufficient distance in all weather conditions for the listener to clearly perceive each note. Scrambling for a solution, Sudre demonstrated the Telephonie to the French navy with an instrument hooked into air compressors for maximum volume. He was warmly complimented, and a commission recommended that he receive a 50,000 franc reward.

But the money never materialized.

BY NOW SUDRE had spent twenty years and a whopping 32,000 francs of his own money on the Telephonie. In desperation, he demonstrated to the French army a system of tuned cannons to communicate messages at an earthshaking magnitude. But still he had no takers, and he began to wonder whether the military was really the best venue for his work.

"While I was still working on the application of my method, either for the use of the army or for the navy, a philanthropic idea dominated my thoughts," Sudre later recalled. "It was an idea of generalizing this method of communication and using it for all the people of Europe."

Sudre also began to reconsider the basis of musical language. He had shifted his Telephonie from a twelve-note chromatic scale (i.e., both the black and the white keys on the piano) to the limited four notes of clarion. But a middle course lay open, one so obvious and simple that it was a marvel that no one had used it before—the diatonic scale. These are the seven "natural" notes, the white keys on a piano, immediately familiar to anyone: do re mi fa sol la si. Today we use ti instead of si, which was the name given to the seventh note in Sudre's time in many non-English-speaking countries.

Using these seven notes as the alphabet for his language, beginning around 1829 Sudre developed the La Langue Musicale Universelle. Unlike the Telephonie, which was merely a musical code for existing languages, this new system was an entire language in its own right, with its own grammar, vocabulary, and syntax. Each note of the scale acted as a basic unit of language. Combine three of these units together—sol, re, and sol —and you get a word like solresol. In Sudre's language, this word happens to mean "language" . . . and eventually, it was the name applied to his ambitious invention.

Sudre limited his words to a five-syllable maximum, thinking that anything longer

would be unwieldy. This yields 11,732 possible words, a far smaller lexicon than most languages possess, but still sufficient for most needs. For maximum efficiency, Sudre banned synonyms from his language—each word had to express a distinctly different thought. His vocabulary is also structured so that reversing the order of syllables reverses the meaning of the word, such as in misol ("good") and solmi ("evil").

Sudre created five classes of words for his Solresol vocabulary, composed respectively of one to five syllables. Sensibly enough, the one-syllable words—of which there can only be seven—are for the most common uses:

do —no, not re —and mi —or fa —at, to so —if la —the si —yes

The forty-nine possible permutations of two-syllable words mostly cover pronouns like "I" (dore) and particles like "this" (fami). They also include some of the more common phrases of speech, like "good night" (misi). (Since Solresol is reversible, you'd be right in guessing that the word for "good day" is simi.) The 336 permutations of three-syllable words are wholly given over to common conversational terms, like "rain" (sisido), "husband" (misifa), and "want" (fas-ifa).

A traveler mastering the first 392 words of Solresol could probably express his needs at least as well as a small child does in a native tongue—and with an equally amusing melodiousness. But as any good numbers runner or state lottery knows, once you get to four or five variables, the number of permutations rises dramatically. The four-syllable vocabulary (with 2,268 words) and the five-syllable vocabulary (with 9,072 words) dwarf the rest—in fact, although his Solresol labors lasted forty years, Sudre never did make it to the five-syllable words.

Given the enormous number of four-syllable words, some system of organization was needed. Keeping the language's musical basis in mind, Sudre established a system of keys for these longer words, where the first syllable indicates its subject matter. Thus doredofa ("head") is much closer in meaning to doredosi ("hair") than to a word starting in a different key, like fasiredo ("railroad"). But with hundreds or thousands of words present in even just one key, the keys are necessarily broad:

do —Physical and Moral Aspects of Humanity

re —Family, Household, and Dress

mi —Human Actions

fa —Agriculture, War, and Travel

sol —Arts and Science

la —Industry and Commerce

si —Government, Law, and Society

A musician might protest that these words are actually in different modes, not keys. But Sudre was not writing for musicians. He always stressed that Solresol didn't require any musical training at all—and so the misnomer "key" stuck.

Sudre tried to apply logical design to grammar. This differentiates Solresol from such exasperating languages as English, which has a bastard grammar of Middle German, Latin, and French. Word order in Solresol is simple: subject-verb-object, and noun-adjective. Plurals are indicated by lengthening the first consonant of the final syllable: saying "Doremmmi" for doreme would indicate that you mean "days" and not the singular "day." And finally, parts of speech are indicated by which syllable is stressed:

redomido —to slander (no accent) REdomido —slander reDOmido —slanderer redoMIdo —slanderous redomiDO —slanderously

You'll notice there's just one verb—the infinitive "to slander." That's because there are no verb tenses to memorize. Instead, you use a word before the verb (usually a double syllable like sisi or rere) to indicate past, present, and future, and so forth: an innovation that would delight any student who's ever had to slog through index cards crammed with verb conjugations.

SHORE'S SYSTEM WAS clever—but could he actually create an entire lexicon from scratch? Pondering the size of the task before him, Sudre often quoted one colleague's comment on it: "I am not sure that God allowed it, but it is not forbidden for the human brain to try it."

Aside from the initial act of conjuring thousands of words, Sudre also needed to create bilingual dictionaries in every major language in order for Solresol to gain usage. He planned to single-handedly write Solresol dictionaries in twelve languages: French, English, German, Portuguese, Italian, Spanish, Dutch, Russian, Turkish, Arabic, Persian, and Chinese.

On July 23, 1833, he invited the press to the Royal Academy of Fine Arts to witness public demonstrations of French-Solresol translation. In his usual fashion, he had students listen to Solresol phrases from his violin, whereupon they translated them into French with astonishing speed. The following June the Paris newspaper La Quo-tidienne asked Sudre for a private demonstration. Sudre showed up in the newspaper offices with two young students, clicked open the latches of his violin case, and asked to take dictation from the newspaper staff. The paper's editor picked up his pen and scratched out a single word onto a slip of paper: "Victoire!" Sudre played a

few notes on his violin. His students, in another room, dutifully translated this into perfect French.

To the staff's bewilderment, Sudre then asked them to give him words in English, German, Spanish, Italian, Arabic, or Chinese— because he had already completed six dictionaries. It was, one editor later wrote, "the only fifteen minutes of my life that I seriously regretted not knowing Arabic or Chinese."

Sudre's reputation, and that of his new language, grew with each performance. When he arrived in Brussels just three months later, articles lauding the "Prophet of Sound" and his new language preceded his appearances; afterward, they marveled at the fact that Sudre was now easily rendering multiple languages into Solresol onstage. Sudre was a confident performer: to start his shows, he'd read aloud from government reports on his inventions, and as an encore he would sometimes sing his own original compositions to the audience.

By the time Sudre returned to Paris, he had become a household name, the subject of newspaper articles and satirical spoofs alike. Composers like Hector Berlioz were attending his shows and pleading with the government to hire Sudre before some foreigner did. The optimism among musicians that Sudre and his decades of effort might have raised their vocation to a new height was perhaps best expressed in a February 5, 1835, article in the music journal Le Pi-aniste: "When it comes to posterity, that which M. Sudre already belongs to, we are assured that he will be most appreciated, and that, if we have elevated a statue of Gutenberg, the inventor of printing, we will find it just later to erect one to the inventor of the musical language."

JUST WEEKS AFTER Sudre was championed in print as the next Gutenberg, he demonstrated an innovation that other constructed language creators had never even attempted: communication with the deaf and blind. At a performance on the night of February 22, Sudre dramatically wrapped a handkerchief over his eyes and asked that one of his students be silently given a phrase to translate. His pupil then walked over to the blindfolded teacher and delicately pressed his fingers into Sudre's palm. Sudre opened his mouth—and to the crowd's disbelief, out came the precise words that had been written down.

What Sudre had done was transpose the seven notes of the scale to positions on his hand:

— IV —

Bile est iuri.ke, lorsqu'on prononce les notes:

do, re, ml, fa, sol, la, si.

Kile est kohitb, lorsque ces monies notes sont tracees stir 1c papier, comme ci-aprcs

Kile est mikttk, lorsque les notes sont indiquecs sur les doigts, commc il suit:

picture0

Kniln elle est occllte, lorsque le sourd-muel, par une legere pression, les fait reconnailre a Yaveugle avec lequel il veut se mettre en rapport.

Par cette courte explication, on voit evidemment que tons les homines de la terre, lors mfimc que la plupart d'entre eux set aient sourds, avelglbs ou miets, trouvent dans cette nouvelle Umgue un moyen de pouvoir communiquer leurs idees.

Sudre's Langue Musicale Universelle (U.S. Library of Congress)

By simply tapping away at the other person's palm, a blind man could now communicate with a mute. Such an invention, in an era where the handicapped were generally left to rot in institutions, was an extraordinary advance. And it was both a strange and strangely touching sight on stage—a boy and a man, hands clasped together, talking in earnest silence.

Now the Gutenberg comparisons were echoing throughout the Parisian press. Sudre arranged for one final performance at the Paris city hall—and then, ominously, he was to go off to England. "We do not believe that a discovery has ever received more impressive testimonies," one newspaper complained, "and we refuse again to believe that to gather fruits, the inventor should be obliged to leave the country." The British press was no less astonished at this fact. After his arrival in London in July 1835, Mechanic's Magazine marveled, "In spite of the serious and important reports we have received in his favor, he has only received feeble encouragement from his own country. We hope he will find a better fortune among us."

Sudre spent the rest of the summer shuttling back and forth between London and Paris; the size of his audience is hinted at by the fact that his London venue was the concert hall of King's Theatre. His six dictionaries were put on display in Paris, and another commission hastily convened to issue yet another glowing report of Sudre's latest invention. By the end of the summer, Sudre had sketched out two more dictionaries, and he was now including Solresol translations of Dutch and Swedish in his shows.

But he could not linger in Paris, for he had received word that his presence was required in England: the King and Queen wished to meet him.

IT WAS WELL that Sudre and his pupils had labored so long onstage before his command performance, for they were now seasoned linguistic performers. He first

gave a polished demonstration in York to the archbishop, the Duchess of Kent, and a certain Princess Victoria—a young woman who would just two years later assume the throne.

He then traveled down to the royal retreat at Brighton, where George IV had once built a gaudy and carnivalesque Chinese pavilion for royal entertainment. Sudre and his students filed across the marble floors into a salon crammed with lacquered furniture, dragon chandeliers, and sumptuous red curtains and bowed to King William and Queen Adelaide. As bridge tables were brought in for the royals to write upon, Sudre introduced himself with a slight nervous tremor in his voice. The Queen quickly put him at ease: on the slip of paper that she passed to him for translation she had written "I wish you success." From there, the rest of his demonstration went without a hitch.

After this triumph, Sudre spent part of 1836 compiling favorable government reports and press notices, including his own translations from the British press, into a compendium titled Rapports sur la Langue Musicale. Sudre stuffed in every article he could lay his hands on, even ones that were direct plagiarisms of others. He took this book on the road across France and in tours over the next several years in Belgium and the Netherlands.

But Sudre had more up his cape. Over the following years he developed an extraordinary array of ways of expressing Solresol. You could do it through numbers (1 equals do, 2 equals re, etc.), which could also be expressed as a series of knocks or other sharp sounds. You could talk through visual hand signals and through the seven ROYGBIV colors of the spectrum. With each passing year, Sudre worked obsessively on further improvements—telegraphic versions of Solresol, stenographic symbols, written shorthand, and the like. He did not expect Solresol ever to replace national languages, but he desperately wished to see it become the second language to which every human would be born into.

It is hard to imagine anyone wanting to live in such a vertiginous world of hidden meanings. Awareness of Solresol can be disorienting and a little unnerving in a chaotic world that does not actually follow its strictures; one modern Solresolist, Greg Baker, recalls that after a while he started wondering how "the beginning of Beethoven's Fifth seems to talk about 'Wednesday.' " Needless to say, obsessive fans who hear already secret messages in music would not do their mental stability any favors by learning Solresol.

And yet the experience may be less cacaphonic than we might imagine. In practice, Solresol is a language in the key of C. Imagine sitting down at a piano and only hitting the white keys randomly. Or, better yet, raid your child's room and plonk away on a kiddie xylophone or toy piano. No matter how hard you try to foul it up, you'll still sound pretty good. This is why virtually every nursery rhyme is written in this key. An

instrument tuned to C can give performances that aren't very structured or melodic, but they'll also never sound harsh or dissonant—and the same can be said for Solresol.

The French language, on the other hand, is a fine instrument for sour notes.

NOT EVERYONE WAS enchanted by Sudre. He began receiving nagging letters in 1839 from Aime Paris, a scholar who became his bitterest critic. In 1821, Paris had tried to create a universal language himself, an attempt that ended with his throwing his notes in the fire. Later Paris attended Sudre's lectures and glowered at the unscientific nature of Sudre's crowd-pleasing proofs: it was, he spat, "a juggling act" put on by a "mountebank."

His hostility reached a peak in the winter of 1846, when he published a newspaper article denouncing Sudre as a fraud. A planned second attack was scrapped, probably by editors who feared a libel suit. But Paris, undeterred, went on to publish two tracts in 1846 and then 1847 containing both his articles and the broadsides fired back and forth through the mail between himself and Sudre.

In his first attack, he concedes that Sudre's Telephonie system might have some limited usefulness, but then heaps scorn on the "so-called Universal Musical Language." Paris was enraged that prominent commissions were giving Sudre their approval, when—or so Paris thought—all Sudre had created was a childish set of "detestable" conversions from one alphabet to another; this, he claimed, hardly constituted a language:

Who would believe, after so many celebrated people have given their seal of approval, that we weren't looking at one of these important discoveries that change the face of the world, and decide the fate of nations? And yet I regret to say that these Institute members have been deceived by Monsieur Sudre. . . . [they] gave him the stamp of a great man simply because he discovered the French language minus its orthography.

Paris goes on to charge Sudre with trying to rip off the government through his continued publicity stunts and begging for grants. He ridicules Sudre's claim of having spent decades developing the language, and even gets up a certain swagger in his attacks against Sudre's requests for a government pilot program: "Sudre has asked for two years to set up such a system at great expense. I could do it in six weeks for free."

Perhaps, Paris insinuated, he wouldn't even need six weeks, because musical language had all been done before anyway by Blaise de Vigenere in his 1587 cryptographic treatise Traite des Chijfres, ou Secretes Manures d'Ecrire, and by Gustavus Selenus in his 1624 work Cryptomenytices et Cryptographiae. Indeed, we can only imagine Sudre's chagrin when in 1830, just one year after he had begun his efforts on Solresol, B. E. A. Weyrich published in Leipzig a slim fifty-page tract on a musical language, Die Instrumentalton-Sprechkunst. To Sudre's great good luck, though, Weyrich's rather

simplistic proposal quickly sank out of view. But by rehashing these ideas so incompetently, Paris charged, Sudre had poisoned the well for any genuine innovators:

After all these frauds have created a public prejudice against them, it takes many men to get a real new idea to be accepted. . . . The Universal Musical Language's nature, usefulness, and power are all illusions. Sudre has destroyed its potential usefulness by his deceits. His work should be rejected as an illusion and a lie. . . . So many great plans languish in obscurity, while puerile, trendy inventions become all the rage. If only geniuses knew how to scheme.

Paris's many charges against Sudre don't bear much scrutiny. His disdain for Sudre's publicity methods may be justified, but that hardly takes away from Sudre's language. The claim that musical languages had been invented before is true but irrelevant—nobody had worked out a vocabulary and grammar to the extent that Sudre had. And the charge that Sudre had falsely claimed years of labor on Solresol was effectively disproved by the eventual publication of a Solresol dictionary and lexicon.

Sudre was bewildered by Paris's vehement attacks. "I don't know why Aime Paris has ridiculed my invention," he shrugged. "He thinks he has the last word on it. He hasn't even had the first word." It may have been simple envy. Or it may have been the ink-flinging of an opinionated crank—something that constructed languages are cursed with a plentiful supply of.

And yet not all of Paris's criticisms proved unjustified: "You want to force musical sounds to serve as signs represented already by codes known by anyone who can read . . . and which you want to replace with less convenient signs which only four in a thousand could interpret," he sniped. "A stupid idea. All that you're doing with your written notes, which are not music to nonmusicians ... [is creating] a time-consuming and unlearnable system."

In this, at least, Paris was absolutely correct. The limited vocabulary and confusing sameness of Solresol words were to haunt its proponents later.

ASIDE FROM AIMÉ Paris, though, during the 1840s and 1850s Sudre piled up accolades with one tour after another; his wife had joined him as his onstage partner, and he continued to work on his dictionaries. There was only one thing keeping Sudre from being a smashing success: a total lack of funding.

Why? In the face of so much praise, it is hard to understand why Sudre didn't get rewarded for his efforts. But in retrospect, the explanation is a heartbreakingly simple one: there's no money in universal languages. There is no freight to be carried by them, no mills to be run processing them, no wars to be won by them, no diseases to be cured. Solresol is, at heart, the philanthropic effort of an idealist—and the

Brotherhood of Mankind does not issue quarterly dividend checks.

Sudre's many allies were understandably appalled by this, and in June 1850 the novelist Victor Hugo, then at the height of his fame and influence, issued this open letter from his home in Paris:

On behalf of M. Sudre, the celebrated inventor of the Musical Language and the Telephonie, who has been little compensated for his work until now, I call upon the sympathy of men who, in all countries, are interested in the progress of human intelligence and of the pacific conquest of civilization.

Shamed by such outcries, in 1855 a jury went out of its way at the Paris Exposition to create for Sudre a special prize of ten thousand francs; they were certainly aware that even this generous sum hardly began to repay Sudre for his thirty-five years of labor.

By the time Sudre dragged himself to the 1862 London Exhibition, his suitcase packed with eight completed Solresol dictionaries for display, he was already an old and increasingly frail man. A jury at this exposition was moved to award him a Medal of Honor, and each word of its citation might as well have been a blow of the chisel into his tombstone: "The remarkable project of Mr. Sudre . . . will it ever receive a useful application? And its author, already quite old, will he receive no other recompense other than the unanimous admiration of an unprofitable jury?"

Months later, he was dead.

A MONUMENT WAS duly erected to Sudre in his home village. But as for the eight dictionaries, his life's work, that Sudre showed to such great acclaim at the London Exposition just before his death ... no one has seen them ever since. Sudre's lifetime of work, it seems, was utterly lost to history.

Except that one dictionary did survive. His widow, Josephine Sudre, took up the Solresol cause after his death, and in 1866 published a French-language Solresol grammar and dictionary titled Langue Universelle Musicale. Although it is Jean Francois Sudre's magnum opus, his widow continued the language's development after her husband's death; the copy possessed by the Library of Congress has a number of inked-in corrections made by hand in what appears to be her writing. The book is an odd size, much like a modern checkbook—shaped, that is, to be slipped into the pocket of a traveling coat. The Sudres foresaw the day when travelers around the world might pull out their Solresol guides to melodiously converse with one another.

Sudre's widow also lived to see the rise of the great medium of the future—the telegraph. In 1865 a major new telegraph exchange was being planned for Paris, and the government needed a standard means of communication. Her husband had seen the first glimmerings of this medium years before, and had gamely suggested a

variation of his Telephonie as a method of telegraphic code. Now his elderly widow, stringing telegraph wires around their Paris apartment and experimenting for five days solid, quickly developed a telegraphic version of Solresol in time to present it to the Minister of the Interior. The demonstration was a great success. . . but her scheme was not adopted.

Madame Sudre's frustration is clear in her piteous preface to the Solresol dictionary: "I have come to tell men of intelligence. . . . Assist me all you can, use your influence, so that music, which is universal, can become the bond of language tying together all nations!"

Her cries did not go unheard. The Societe pour la Propagation de la Langue Universelle Solresol was founded in Paris, although the absence of material on Solresol in libraries today is not much of a testament to the society's effectiveness. Nonetheless, the use of Solresol grew steadily in the decades after Sudre's death, with thousands of speakers in France becoming familiar with its use.

Solresol reached a high-water mark in 1902, when society head Boleslas Gajewski published a brief Grammaire du Solresol, which represented a refinement and expansion of the grammar rules set down in Sudre's 1866 guide. Although Gajewski starts his guide with platitudes about how useful Solresol would be for international travelers, he makes a point of printing one key paragraph in bold type:

Thus by means of Solresol, the blind will be able to exchange ideas with foreign deaf-mutes and vice versa, so everyone will be able to answer them and be understood by them.

There are in Europe more than 250,000 blind people and more than 210,000 deaf-mutes; there are thus 460,000 individuals, in Europe alone, who possess scarcely any means of communicating with everyone else, and who, thanks to Sudre's SOLRESOL, will be brought back to everyday life and see the inconveniences for their disability reduced.

Gajewski probably knew that the game was nearly up for persuading a mass worldwide audience to adopt Solresol; those with disabilities presented a captive audience that was more attainable and easily focused upon.

Gajewski and his society were at least able to make enough of an impact that when universal language advocates Louis Couturat and Leopold Leau published their 1903 volume Histoire de la Langue Universelle, they spent a chapter on Solresol fretting over how many people had taken up with an inept language: "One can hardly explain the relative success of this language, the poorest, most artificial, and most impractical of all constructed languages. ... It is useless to attempt to express all human ideas with only seven syllables." At times they almost directly quote Aime Paris's laments that

Solresol was being learned at the expense of superior systems. As for its uses among the deaf, mute, and blind, they hardly felt this obliged the able-bodied to learn the language: "Why build the same bike for healthy people as for lame people?"

Couturat could have saved himself the expense of ink, and Gajewski the trouble of bindings and paper; new artificial languages like Volapuk and Esperanto were on the horizon, and their recognizably European basis helped them become embraced in a way that Solresol never was. Gajewski's book, meant to spark a new Solresol movement, proved to be a last gasp. Scarcely another word was written on Solresol for the next century, and soon the very existence of the language was forgotten.

YET SOLRESOL IS no longer entirely dead. There are about a dozen enthusiasts scattered across the world—most notably two Australian cryptographers (Greg Baker and Jason Hutchens), who discovered the language independently of each other; the Alaskan researcher Stephen Rice; California musicologist David Whitwell; and Oregon physician John Schilke. Each has worked to preserve the history of this bizarrely charming language, often while completely unaware that any other Solresolists were even out there. Fittingly enough, the reemergence of this Universal Language has largely occurred in that most universal of mediums: the Web.

Some have even attempted to compose in the language. Musician Bruce Koestner—who has also created a chromatic (i.e., twelve-note, including both a piano's white keys and black keys) language called Eaiea—has written part of a chamber opera in Solresol; in 1997 a Dutch radio presenter, Yolanda Mante, wrote and broadcast a brief skit in Solresol about Sudre.

And the revival looks as if it may even be gaining momentum. Greg Baker has registered the domain name of solresol.org.au as a future base of operations, and Jason Hutchens has floated the idea of computer programs that will convert Solresol writings into files that could be exchanged between musician-speakers worldwide. Rice has begun to make some refinements in the language; when completed, they will be the first step forward in Solresol's development since Gajewski's 1904 text.

But unlike proselytizers for international languages like Esperanto or Interlingua, the last practicing Solresolist probably passed away in a French nursing home decades ago. The difficulty in establishing pauses between words and the easily confused vocabulary dog Solresol as much today as when it was at its height a century ago. Modern Solresol followers largely pursue it as an exercise in comparative linguistics, and a worthy challenge in reconstructive history.

One enigmatic trace did turn up before the current revival: years ago, someone in the computer industry quietly inserted the seven letters of the Solresol alphabet in the Unicode sixteen-character set. "Here was a language that had very little written record," Greg Baker muses, "now being regarded by the computer industry as an

important international language, on par with Thai, Tamil, or English."

Solresol domifare. . . .