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## The Order of Signs: Perspectives on the Relationship between Language and Thought during the First Century of Widespread Sign Language Teaching

#### Sabine Arnaud

While current debates oppose the cochlear implant's privileging of speech acquisition to teaching sign language, nineteenth-century debates, in contrast, opposed those who saw sign language as a tool for learning to read and write, and those who saw in it an autonomous language for organizing thought itself. Should the order of gestural signs follow written syntax? Or should it have its own coherence, that is, possibly a different syntax and order of enunciation? Starting with these questions, distinct teaching legacies developed, specifying which kinds of signs to use in which context and what role signs were to fulfill. This article focuses on French deaf and hearing teachers whose positions were influential throughout Europe and the United States, moving from Abbé de l'Epée's 1784 method to Rémi Valade's 1854 publication of the first sign language grammar.

Key words: French sign language, methodical signs, natural signs, Sicard, nineteenth-century deafness, syntax.

After a long century of discredit and prohibitions following an 1880 congress on deaf pedagogy in Milan, where European (mostly French and Italian) and American teachers, institutional directors, and administrators decided to focus exclusively on the teaching of speech, the teaching of sign language slowly resumed in specialized schools and associations. By the turn of the twenty-first century, the use of sign language was fully reestablished in most European countries. 2 Since the United Nations 2006 Convention on the Rights of Persons with Disabilities declared that the human rights of deaf people start with "access to and recognition of sign language, including acceptance of and respect for deaf people's linguistic and cultural identity, bilingual education, sign language interpreting and accessibility," its use has been wholly acknowledged.3

Yet sign language endangerment is still a source of concern. Over the last couple of decades, the invention of the cochlear implant has been seen as a new threat to the teaching of sign language and deaf culture, resulting in a debate centered on the priority given to speech over signing. On the one hand, the difficulty of identifying language in the presence of perceiving sounds is one reason otologists' believe that deaf children with implants should not be taught sign language. The success of the technique, they claim, lies in having subjects with implants focus exclusively on these sounds until they can recognize language. On the other hand, signers, linguists, and people in favor of sign language question the value of giving people with implants no other choice than to decrypt sounds, when they could easily communicate in sign language to fulfill their linguistic needs. Harlan Lane, a strong advocate of signers, states: If cultural Deafness were not medicalized by psychometrics and audiology, there would be no special education, but simply bilingual education for children whose primary language is ASL. If the members of the Deaf community were characterized in cultural terms and bilingual education was largely successful, there would be little motivation for parents to seek a surgical intervention of little value and unassessed risk to most Deaf children.4

Such advocates resent that most parents learn that their child is deaf in a medical context at birth and are presented with the cochlear implant as the solution to deafness, without being informed about the potential of education via sign language. As for those who are aware of the various possibilities, the choice of what is best for the education of their deaf child remains a difficult one, as deaf people's access to language has been at the core of an often irreconcilable debate in recent decades between specialists of different fields of expertise.5 The impact of the century-plus ban on the teaching of signs and the current spread of the cochlear implant has been such that the debate between speech versus sign constitutes the main reference point for Western deaf history and culture over the last forty years.6 In line with this perspective, the history of nineteenth-century deaf education has been framed, in great part, as an oppositional one between the teaching of sign language and the teaching of speech, and characterized as a slow shift from a wide acceptance of sign language to the overwhelming influence of the pedagogy of speech acquisition. In this article, I claim that this depiction of divided priorities is anachronistic. I will show that up to 1880, the terms of the debates were posed quite differently and that for a full century teachers diversified their methods.7

If debate and controversy abounded at the time, the core of the debate was not speech versus sign, but the ordering of signs. The question of the order of signs involved several possibilities. Was the order of signs to follow spoken syntax? Or was it to have its own order of enunciation, starting with the description of the context, and only afterward mentioning the action involved? These were not merely grammatical or linguistic questions. As this article will demonstrate, teachers and theoreticians linked the order of signs with the order of thought itself. For many, the national spoken language dictated the order of signs, and failure to comply with this order signified an inability to think at all. A debate emerged between those who saw gestural signs as a means to appropriate writing by learning to organize thoughts in the order of spoken syntax and those who saw signs as an autonomous language for giving form to thoughts; the latter believed that syntax should follow the order that deaf people naturally used. While the former were adamant about maintaining the word order of the respective national language, the latter prioritized adopting the pupils' own order of signs.

This debate eventually led to the development of the first sign language grammar. To prove that using an order proper to signs was neither a matter of chance nor the mark of an incapacity to think, the latter group of teachers considered it crucial to conceptualize the type of order involved so as to convince their colleagues to adopt it. In the light of today's debates about the value of sign language for communication, education, and intellectual development, it is fascinating to discover these early conceptualizations, which explore the scope and analytic specificity of sign language. In these discussions, sign language was to become established as a language in its own right, with a coherence and syntax that had to be learned, taught, and developed accordingly. To untangle these different signing traditions, this article investigates the development of the main legacies in signing throughout the nineteenth century, and starts by asking how each conceived the relationship between the order of spoken language and the order of sign language.

In this regard, French deaf education offers a particularly striking case. But for a few exceptions, signing maintained priority in France up to 1880. Yet the strongest partisans of the use of signs, whose names are recorded in almost all deaf histories as signing advocates—Charles-Michel de l'Epée (Abbé de l'Epée), Roch-Ambroise Cucurron Sicard (Abbé Sicard), and Roch-Ambroise Auguste Bébian—also favored teaching speech.8 And a series of deaf teachers, including Benjamin Dubois and Louis Capon—who directed his own institution in Elbeuf, in Normandy—taught both signs and speech.9 In fact, most considered speech an additional skill to be conferred once the use of signs and the reading and writing of French had been, at least in part, mastered.

Questions about the order of signs were first raised in French pedagogical texts, and as methods taught by de l'Epée and Sicard spread, they also came into play in other countries. At the time, no one spoke of a Langue des signes française (LSF), but merely of a "sign language" assumed to be universal—an expression that I will keep in this article for historical accuracy. Throughout the nineteenth century, debates in France were influential throughout Europe and the United States. Connections between national institutes were close, as teachers looked for support and exchange beyond their national borders. They subscribed to and collaborated with foreign journals, wrote reviews of publications printed abroad, and at times even traveled to learn about foreign pedagogies. The most extreme examples of these ties are, first, the French deaf teacher Laurent Clerc's visit and eventual immigration to the United States in 1817 in order to found, with Thomas Gallaudet, the Hartford School for the Deaf and Mutes; and second, Edouard Huet's foundation of a deaf school in Brazil.10 Ted Supalla, Patricia Clark, Yves Delaporte, and Emily Shaw have done important work digging out the historical similarities between American Sign Language (ASL) and LSF.11

While Françoise Bonnal-Vergès and Delaporte have done extensive research on the geographical variation of signs in the French context, today French sign language is usually spoken of as though it had achieved a complete form by 1880, a form the move to oralism (i.e., exclusively teaching through speech) would have eradicated.<sup>12</sup> Certainly the number of presentations held in sign language at international congresses, in national and regional schools, at annual prize ceremonies, and at deaf gatherings and banquets attests to the full development of using sign language.13

Up to 1880, the main focus in national and regional institutes remained the teaching of writing, but from the start of deaf education, conceptions about signing differed widely.<sup>14</sup> There was, in fact, no agreement on the structure of sign language. As deaf children increasingly came together in schools where they communicated with their peers, the challenge deaf and hearing teachers faced was standardizing signs and agreeing how to treat and spread new signs in a useful and accessible way. Beyond the question of sign language dictionaries, at stake was providing the best system of signs to represent the syntax of sign language. Strikingly, reflection upon systems of signs repeatedly involved the issue of the order of signs to promote enhanced communication and learning. Teachers kept seeing pupils using a different order in sign language than the French word order, for example, the subject would come after the verb.

This led some of them to view it as mere incoherent statements. While it was clear to some that this order was crucial for their pupils to access meaning, teachers struggled to characterize it. What kind of order was it? Could it be, truly, the natural order of thought? To elucidate this debate on the order of signs, I will first briefly highlight the role ascribed to order in language and thought in the eighteenth century and then consider the remarks of select deaf and hearing teachers, mainly de l'Epée, Sicard, Pierre Desloges, Roch-Ambroise-Cucurron Sicard, Abbé Daras, Pierre Théobald, Pierre Pélissier, J. Valette, and Rémi Valade.

The Role of the Order of Syntax

Well before the nineteenth century, the order of syntax and the capacity to think had been considered reciprocal phenomena and had long been at the center of conceptions of language. During debates questioning the uniqueness of man's relationship to language that were spurred on by an exhibition of speaking automata, Descartes's follower Géraud de Cordemoy, in his 1668 Discours physique de la parole [Physical Discourse on Speech], distinguished both the speaking machine and the parrot from mankind.15 In his view, both the machine's and the parrot's inability to do anything but repeat words in the same order demonstrated each one's incapacity to think. They were unable to independently arrange language in a grammatically correct order and, as a result, did not make sense.

In the mid-eighteenth century, when debates around the origin of language and its natural versus artificial character surged, the role of the order of signs and its relationship to thought was called upon once more.16 Pierre Louis Moreau de Maupertuis, who presided over the Berlin Academy of Science and was a member of the Académie française and the Académie des sciences in Paris, considered, along with many of his colleagues, that the best language is one that equates the order of signs to the order of thought. In an essay, he stated: If one could define the nature of ideas properly and rank them in an order that stands for their priorities, their generality, and their limitations, it would not be impossible to establish characters that have relationships between themselves equivalent to the relationship between ideas. These established characters would thus be not only an aid to memory, but also instruction for the mind: & this philosophical writing would justly deserve to be the universal writing or Language. 17

Not only did language and thought affect each one's development, they also influenced each one's clarity. Ordering one's ideas would lead to the creation and development of a language that would, in turn, favor the development of ideas.

When it came to sign language, similar theories pervaded both conceptions about the acquisition of French and ideas about sign language having its own system. The difference between the order of signs in sign language versus in French was soon the subject of a discussion about what kinds of signs to use and what role signs fulfill. Pedagogical, anthropological, and social conceptions all participated in the linguistic creation of specific systems of gestural signs. Building upon these views throughout France and the Western world in the nineteenth century, theoreticians split into those who saw signs as mere tools in teaching French and those who saw the potential for realizing an independent language.

#### De l'Epee and Desloges's Opposite Conceptions of the Order of Signs

The first two texts about sign language pedagogy in the late eighteenth century, one by a hearing and one by a deaf writer, both stressed the role of syntactical order for thought. Abbé de l'Epée, the first to achieve fame for his school, presented his method in the light of his own education as a Jansenist priest.<sup>18</sup> In fact, true to the influential 1662 text Logic, or the Art of Thinking (commonly known as Port-Royal Logic), for him the order of written French perfectly captured the way people think. Talking about his first two pupils, de l'Epée explained in the foreword to his main work, La Véritable Manière d'instruire les sourds et muets [The True Manner of Instructing the Deaf and Mute]: "The only goal that I set myself was to teach them to order their thoughts and combine their ideas. I believed I could succeed by using representative signs that were subjected to aMethod from which I composed a sort of grammar."<sup>19</sup> In other words, while teaching them language, de l'Epée also strove to teach them to organize their thoughts.

To this end, he created two types of methodical signs: signs that stood for meaning and signs that provided the core instruction of French grammar and syntax. The latter were grammatical signs expressing the types of words involved in French (nouns, adverbs, adjectives, etc.) and their role in the sentence. De l'Epée did not speak of methodical signs as a sign language; they were, rather, a means of teaching written French in class—and of proving the intelligence of his pupils, who could translate back and forth from one language to the other. Pupils would sign the meaning of each word, and each time also sign if this sign stood for an article, a noun, a verb, its gender, if it was singular or plural, or, in the case of a verb, its tense. In other words, methodical signs were not a sign language, not even a language per se, but signs reproducing French syntax. These signs, he asserted, could be adapted to the grammar of any country; he successfully convinced his contemporaries that this was so, which led to the opening of many schools around Europe based upon these precepts.20 Methodical signs were construed in opposition to so-called natural signs. By borrowing the term "natural signs" to characterize deaf people's sign language, de l'Epée forged the link to a long genealogy of works on language, notably debates on the natural versus arbitrary character of language, on the human versus godly origin of language, and on the role of natural gestures for rhetorical purposes. English physician and philosopher John Bulwer and Italian legal advisor Giovanni Bonifacio were some of the famous thinkers who, in the first half of the seventeenth century, theorized the powerful role of natural signs for orators, presenting them as ameans to emphasize expression and move the reader.21 Situating his conceptions within the legacy of Aristotle, French physician and philosopher Marin Cureau de la Chambre dwelt shortly afterward upon the use of natural signs in the science of physiognomy to understand a person's inclinations.22 Building upon Descartes's work, Cordemoy and Bernard Lamy, respectively, spoke of natural signs of the passions and of the soul. As such, natural signs were seen as part of hearing culture, moving along with words to emphasize something, attract the attention of the auditor, and produce the vividness of discourse.23 While these developments cannot be addressed at length here, I will just remark that conceptions of "natural signs" carried connotations that emphasized the expressive powers of feelings and needs, and that de l'Epée strategically opposed this with the analytical character of his methodical signs, emphasizing their relation to the mind.

De l'Epée's contemporary Desloges also emphasized the role of order, but his goal was to turn signs into a proper sign language.24 In his Observations d'un sourd et muet, sur un cours élémentaire d'éducation des sourds et muets [Observations of a Deaf and Mute on an Elementary Course of Education of Deaf and Mutes], he wrote:

I was long ignorant of the language of signs. I only used scattered signs, without sequence or connection. I did not know the art of uniting them, of shaping them into distinctive scenes, by means of which one can represent one's various ideas, transmit them to one's fellows, and converse with them in a discourse with consistency and order.25

De l'Epée and Desloges, then, had two different imperatives. For de l'Epée, thinking with order depended strictly upon the order of French syntax, while for Desloges, a discourse in sign language had its own order. As such, the idea of order became directly related to the stakes involved in the use of signs. Their respective positions relied on larger questions: Was sign language intended to serve the acquisition of the French language, as de l'Epée envisioned, or was it meant for the early instruction of deaf pupils, for example, in preparation for learning a trade? Was it meant to be used for communication between hearing people and deaf people, as de l'Epée insisted? De l'Epée's theories were at least partly aimed at proving the intelligence of deaf people through their capacity to use such a complex system and to move systematically from one language to the other. He also aimed to prove the universal potential of sign language. For Desloges, on the other hand, it was a language to be used first and foremost between deaf people. The theorization he offered worked to establish the autonomy of sign language.

#### Sicard's Shift

The most famous teacher of the following generation would acutely face the difficulties raised by the existence of such opposing views. Sicard, the first director of the National Institute for Deaf-Mutes, which was created in the wake of the French Revolution, built his method on de l'Epée's legacy and on his own experiences teaching Jean Massieu and Clerc, his two famous pupils.26 The question of the order of signs was at the heart of Sicard's changing positions in regard to deaf people. His publications delved into sign language, the singularity of deaf education-in which the very foundations of language had to be taught first-and the challenges of teaching French as few others did over the course of the nineteenth century. Yet the fact that Sicard supplanted de l'Epée's favored follower, Abbé Armand Massé, as director of the institute and the cruel way he described deaf people in his Cours d'instruction d'un sourd-muet de naissance [Course of Instruction for a Deaf-Mute from Birth] were enough to turn many historians of the field against him and consign his conceptual work remains little known.27 While at first no claim was too exaggerated for him to use in convincing his contemporaries of the importance of deaf education-citing evidence for what he considered to be the subhuman capacities of uninstructed deaf people-he later demonstrated an uncommon attention to the sign language his contemporaries used. Far from exclusively defending the order of French syntax, as is often believed, Sicard instead adopted important structural changes, not least to avoid what he considered to be the pitfalls of de l'Epée's method—such as giving his pupils the means to accurately translate signs into words without fully understanding them or being able to form sentences on their own. A comparison of two of his works, published eight years apart, exemplifies this reversal.

The Cours d'instruction focused mainly on finding ways to convey the necessity and meaning of French grammar to those unable to learn it passively, that is, by merely hearing speech. In one of the final chapters, Sicard insists that instructors emphasize the order of signs in constructing the three languages he uses as examples (French, English, and sign). He explains that order is just as crucial to expression and understanding in sign language as it is in French and English. Understood in the wake of eighteenth-century work on enlightenment and civilization, Sicard was translating the syntactical order as an expression of social and moral order. He differentiates the natural and metaphysical order of sign language from the grammatical order of French: One [order] must be that of the Deaf-Mute, for whom words cannot have any other relations between themselves than that of ideas whose signs they are; the other must be that of civilised people, who have shaped their languages, and who have established, between the words that are their elements, relationships of appropriateness and coordination.28

Two examples he gives illustrate his pupils' syntax:

One day I asked a pupil who had already received instruction: Who made God? He answered in this form: God made nothing. I believed that he had not understood me, so I asked him: Who made your shoes? He answered: Shoes made the shoemaker.29

Sicard concludes: "Any other construction will be, if you wish, more analytical; but it will be less natural."<sup>30</sup> His examples have a strategic aim: one inversion in word order can reverse the theological order, and soon the very order of humankind is turned upside down. Disorder threatens; the creator is dismissed from his role in the creation, and the order of things becomes arbitrary. With these two examples, Sicard suggests that no order is merely linguistic. The linguistic order, because it controls meaning, also controls access to the world at both a theological and a social level. Whoever does not master this order remains foreign, not only to language but to the society that uses it, because they are incapable of participating in the order of things.

As such, Sicard acknowledged the autonomy of sign language, placing it in a different realm from that of grammatical language, whose constraints he detailed. Sign language, he aimed to show, was universal, and deaf people created it as their thoughts developed. In effect, he was recognizing both the importance of communication between deaf people in sign language and the need for hearing people to learn to communicate in sign language by, if necessary, giving up the order of French grammar in their intercourse with deaf pupils until the latter were far enough along in their knowledge of French.

The teacher's first task was to "destroy . . . French construction, and arrange the words in the order of sign language."<sup>31</sup> To be understood by their pupils, teachers had first to adopt their pupils' language, and then adapt their own language to it. Sicard explained that only long after becoming accustomed to expressing themselves in natural sign language could deaf pupils start learning the French order. Methodological signs were not the only ones that followed a fixed order.

By advising his colleagues to start their teaching with a radical take, Sicard legitimized the use of sign language. Only in a later stage should pupils learn, step by step, French syntax. For Sicard, deaf people follow ideas in the order inwhich they come to them; hearing people formulate themaccording to the order of grammatical rules, adding a series of elements—articles, prepositions, coordinating conjunctions (which are reproduced in the order of methodical signs) as so many markers of the sophistication of their language and of their own expression. So as to subvert its supposedly "spontaneous" and "savage" character, deaf people's expression, Sicard argued, must be redistributed according to a series of linguistic forms that obey a structure foreign to sign language. <sup>32</sup> And that is where the role of methodical signs came in—to endowsigned sentences with the French order. At stake was disciplining the haphazard nature of their language aswell as structuring the creation of new signs. Sicard represented this difference between the two languages as the order of reason versus the order of inspiration.

The constraint of the order of discourse, which involves not the content but the form of discourse, becomes the pretext for a hierarchy between speaking people, and even more between hearing and deaf people. The knowledge of French syntax becomes a criterion for full membership in humankind. The mastery of linguistic conventions of French distinguishes those who are members of civilized society.33

Eight years later, by now a member of the Académie française, Sicard moved away from his early statements. In his Théorie des signes [Theory of Signs], he announced his plan "to lay the foundations for the language of this new population."34 He promised to stabilize this language, with the twin goals of facilitating the instruction of deaf people and aiding communication between deaf and hearing peoplethereby granting a new authority to sign language and characterizing deaf people as mastering a language.35 The text also offered an occasion to retract his previous statements about the moral limitations of deaf people. He wrote that he "had not yet had the means to interrogate the Deaf-Mute about the ideas he had had before his education, and that [the latter] had not vet received enough instruction to be able to answer."36 Sicard was now presenting himself as the enlightened observer, who, while inheriting de l'Epée's methods, also sees their limits. He names the order of syntax as the origin of the communication difficulties that previously led him to misjudge the intellect of his pupils. Describing those bygone days, he states:

We had given [deaf people] everything: ideas, thoughts, and expressions. But we had not yet observed them. They were tools that we prepared and not men that we trained; it was their memory that we exercised; and we attributed to reason alone the results we obtained from this exercise: it was false gold instead of real gold.37

"It was easy to go astray," he explained, adding that deaf people "could not have another order of construction than that of the generation of ideas; as a result, their manner of expressing themselves was constantly coming from the opposite direction than ours."38 On the role of order, he wrote that the issue lay in "the difference between thinking and formulating one's thought . . . the order of construction [being] a general source of mistakes."39 But while some of these statements are similar to the ones he issued previously, their scope widens with this new interpretation. In this publication, he goes so far as to position sign language as a superior language and to undermine the authority of French, writing that "due to lack of case and a thousand other imperfections, it [French] is subjected to a purely grammatical order." Grammar is here no longer a marker of civilization; rather, it is the necessary compensation for imperfection. The "mechanism" of French is "monotonous" (monotone) and an "importunate yoke" (joug importun), and he advises his fellow teachers to give up

hope of seeing their pupils communicate between themselves in French when they can use sign language.<sup>40</sup> Far from ennobling language, grammar subjugates it. Reminding his readers that in sign language "the placement of words is the only indication of their role," it is hearing people's ignorance of sign language that becomes the cause of misunderstandings and misplaced expectations.<sup>41</sup>

After just a few years of teaching at the National Institute for Deaf-Mutes, Sicard, who held the chair of grammar at the Institut de France, took it upon himself to reject any description of sign language as savage and random. One may wonder why, despite displaying exemplary radicalism in asserting the power of sign language, Sicard and his colleagues still accorded so much importance to the teaching of methodical signs, which remained the tools of choice for learning French and standardizing signs. In the United States in the 1830s, as R. A. R. Edwards has shown, teachers progressively abandoned the use of methodical signs, following the initiative of the New York Institution for the Instruction of the Deaf and Dumb. As he explains, according to the educators there, "deaf students should be pressed to translate English into the natural language of signs in order to demonstrate that they have truly understood the meaning of the English words."42 In France, by contrast, professors kept diverging, creating their own methods to fit their views.

#### Signing and Ordering Thoughts

In the following generation, some teachers at Parisian institutions and in the provinces, such as Daras, editor between 1853 and 1855 of a journal about deaf and blind pedagogy, insisted even more loudly on the pedagogical benefit of methodical signs in learning syntax. These methodical signs were to form the basis of education, as they provided access to the conventions necessary to language. Daras regularly named natural signs "gestures," thus diminishing their character as signs. He presented them as related to feelings and to immediacy, pointing out that the constant creativity involved in their use differentiated them from the rigor attached to methodical signs. Daras was most vehement in his critique of using natural signs:

Therein lies a huge danger for the success of the classical education of the deaf-mute pupil. As long as he is exposed to this harmful influence, he will lose in the rectitude of grammatical language everything that he will give to the negation of syntax and the arbitrariness of the sign.43

When Daras positions linguistic correctness on the opposite side of spontaneity and rashness, he turns the use of methodical signs into more than a linguistic tool. In his writings, methodical signs strongly resemble an instrument of discipline, their mastery equating to the negation of what he saw as "intemperance."<sup>44</sup> Beyond the communication it favored, he viewed the teaching of language as more a tool of socialization than of intellectual development.

But Daras and some of his hearing colleagues were not alone in advocating methodical signs. Deaf teacher Joseph Nicolas Théobald, who taught at the Institut Départemental des Sourds-Muets in Besançon and at the National Institute in Chambery, and from 1876 in the National Institute in Paris, wrote about the threat that using natural sign language posed. In one of his publications on pedagogy, he first reminded his readers that what he called the language of signs was the best means of developing the intelligence of the child deprived of hearing, as it allowed for a quick extension of the child's knowledge. Deaf people, he wrote, think in signs, just as hearing people think in speech. Though teaching in sign language is as agreeable to the teacher as it is to pupils, he also insisted that the consequences were disastrous, since it turned pupils away from written sentences, whose syntax had little to do with that of sign language.45 Sign language syntax led pupils to relinquish French construction and adopt ready-made sentences that they simply copied, no longer creating any of their own. As he claimed, "the less sign language intervenes in the teaching of French, the more abilities pupils show to express themselves in writing."46

Rather than relinquishing the use of natural signs, he advocated moderation, even if that meant slowing down pupils' acquisition of knowledge. Natural signs were to be proscribed, for example, in teaching history, since he saw in them more amusement than instruction, with the added disadvantage of making the pupils lazy. Teaching history should instead proceed with written language, so that pupils can make full use of their knowledge. Comparing sign language to a "remedy which, taken in too strong a quantity, kills instead of cures," he went so far as to present the deaf-mute pupil as a "sick person who needs to be given back health, that is, knowledge of himself and the objects that surround him; then, to give him the means of entering into relationship with them. For the first part, sign language is sufficient to a certain degree; for the second, writing is indispensable." 47 He insisted that forgoing the mastery of writing was essentially just "denying deaf-mute people the right to be in direct relation with anyone else than their fellows inmisfortune."48 He also emphasized the advantages of learning articulation as the only way to avoid being a stranger in a hearing environment.49 What mattered was maintaining the right proportion between all these forms of communication. A few years later, when teaching signs was abandoned in favor of speech, he would nevertheless advocate for teaching methodical signs and using natural signs along with speech.

As a deaf teacher, Théobald's position in relation to sign language illustrates the degree to which the distribution between teachers who favored methodical signs and those who favored natural signs is difficult to account for. While these teachers knew that pupils communicated among themselves in sign language, they dismissed the value of sign language for acquiring knowledge. Instead of recording natural signs so that they could become conventional signs, they preferred to develop a separate system of signs. These teachers argued that methodical signs would facilitate the development of analytical and synthetic thinking.

Learning another linear order of signs than the one used in sign language went a step further: it meant adopting order as a form of living in society, at a time when many viewed deaf children as less civilized than their hearing counterparts. These teachers, and their followers throughout France, Europe, and the United States, were surely aware that the majority of the population was unable to read and that the few who could write would likely make spelling mistakes. As such, what pupils acquired were writing skills that would be of little use in daily communication outside the institute—except, that is, for those who embraced the career of typographer. This was a job for which deaf people were eagerly hired, as it was widely known that they would never make spelling mistakes due to auditory similarities. Although methodical signs were used in numerous institutions, criticism of them developed throughout the nineteenth century.

While Auguste Bébian was the only declared advocate of teaching natural signs at the turn of the 1820s who could also hear, beginning in the 1840s, a series of deaf and hearing teachers stared supporting natural signs.50 These included Pélissier and Valade, among others at the National Institute for the Deaf-Mute in Paris, as well as Valette in Toulouse and Soeur Alleau and other nuns in Angers. This was a radical move for hearing teachers, as they had to learn the language from deaf pupils and teachers, such as Ferdinand Berthier, Alphonse Lenoir, Pélissier, and Valette. If in class they were to correct natural signs in the name of the conventions to be adopted, then they also had to adopt their specific syntax. Natural sign language was now seen as the best means of exposing deaf children to ideas about their surroundings in order to socialize them. The teachers' role was to support the development of their ideas by helping them systematize their observations and revise their way of constructing signs. They were also taught written French and, on rare occasions, speech.

Teachers who wrote analytical reflections on sign language, however, tended to be hearing; deaf teachers instead were inclined to emphasize its natural quality. Pélissier, who taught at the Imperial Institute, and was famous for the poetry he published as a deaf writer—to the point of attracting the attention of Alphonse de Lamartine—did not hesitate to oppose the conceptualization of a sign language grammar: "Mimic language is free of all grammar; its syntax is independent of rules and follows only the pace of thought. Therein lies its universal condition."51

He was far from the only one to do so. In an inexpensive booklet that went through two editions, Valette, a forgotten deaf teacher educated in the school Abbé Chazotte created in Toulouse, further developed the scope of sign language, also beyond any grammatical rules. His Origine de l'enseignement des sourds-muets en France [The Origins of Deaf-Mute Education in France] emphasized the opportunity that sign language offered to eliminate the deaf person's experience of language as a "foreigner." This image of a foreigner was often used at the time, typically by those who insisted that sign language was an autonomous language, that the difficulties deaf people encountered were strictly linguistic, and that no one should expect them to master French better than foreigners did. Reversing the claim that sign language was primitive due to its lack of grammar, Valette declared it the language of the future, also referring to Gottfried Wilhelm Leibniz's idea of a universal language:

This language is the universal mode of human ideas and thoughts. It is the enemy of strict rules of grammar, dismissive of any preparation, yet does not sacrifice grace; in a word, it is independent and simple like nature, and, just like nature, able to attain the furthest reaches of human thought. If people would take the trouble to develop it as deaf-mutes do, Leibniz's and Descartes's dream of a universal language would soon be realized. The world would no longer be a Babel, and the distance created by linguistic diversity would no longer exist, just as it has ceased to exist for deaf-mute people.52

Valette insisted on how easily such a transformation could be achieved. Schools for deaf pupils should be constructed alongside those for the hearing, he suggested, so that pupils could meet in the same recreation space. With daily interactions, sign language would quickly mature and expand. Valette mentioned Virgil, Torquato Tasso, John Milton, Francois-René de Chateaubriand, Alphonse de Lamartine, and Victor Hugo, along with Pélissier and Berthier, as the main references for deaf people, as these authors, he felt, gave shape to aspirations for a bigger life, beyond isolation. Such reading was not an exception among the defenders of sign language, as attested by Louis Allibert, who made a similar claim in a letter to the Academy of Medicine in 1853.53 He explained that as a pupil at the Parisian institute, he would regularly meet Berthier, a deaf teacher who also favored natural sign language, to have him explain the nuances of Jean de La Fontaine, Jean-Baptiste Racine, Nicolas Boileau-Despréaux, Molière, and Voltaire. Valette also claimed a "providential role" for the deaf by their very use of language.54 His booklet reshaped the vision of deaf people as predestined to be pioneers in their societies. Paradoxically, although many deaf teachers favored using natural signs, most dedicated themselves to writing French grammar.55

Throughout the nineteenth century, until the political pressure to teach speech transformed pedagogical methods, most teachers seemed to go back and forth between teaching different systems of signs. Such was the pedagogical approach of Alleau, director of a convent in Anger where another nun, Soeur Blouin, first opened a school for deaf pupils in 1777 following her training by de l'Epée. This school flourished, and in correspondence with the prefect of the department of Maine-et-Loire, which funded the school, Alleau provided a detailed description of her teaching method and reported on her pupils' progress.56 Following the prefect's request for a document specifying her teaching rules, she replied on September 17, 1863, that it should not indicate that instruction consists of sign language. Fully in line with the teachings of de l'Epée, she stated that sign language was only the means of instruction, not the end. Sign language served to initiate pupils into knowledge of written French. Alleau, whose commitment to sign language cannot be doubted, offered to replace the sentence with "The instruction will consist of written French."57

In yearly discourses before the prefect and other government officials who visited her school for awards celebrations, she explained the uses, merits, limits, and pluralities of sign language again and again. She asserted the singular role of this language, which was more than a native language, and reversed roles: it is deaf children who create it on their own, and their mothers who have to learn it from them.58 Sign language is the fruit of necessity, and new words are coined as needed. Another year, the mother superior recounted:

When children arrive in our institutions . . . through the conversations they have with their comrades in misfortune, their language is enriched daily, and soon expands considerably. The children forget their own signs to adopt those of their comrades, and one notes that such children, previously understood by their parents and friends, can only be understood with difficulty once they learn writing and methodical signs . . . [which are] instituted to bring mimic language to the level of our artificial languages. Despite the dryness and excessive length of this language, we need to use it to explain the theory of the different parts of teaching, especially grammar and arithmetic, to our pupils.59

Acknowledging that several institutions did not favor methodical signs, she concurred with them, adding that methodical signs "leave the imagination of the deaf-mute child passive and frozen"; nevertheless, she advocates using them in the absence of better means to teach syntax.60 She then presents a third kind of sign, which she qualifies as intermediary, based partly on nature and partly on convention, calling it the true language of deaf people. On top of the elliptical nature of sign language, and the shift in the order of the propositions, is the speed with which signs can be executed. Much faster than speech, a long sentence can be expressed with four signs. And far from hindering the expression of ideas with confusion, she argues, the reversal of order is a source of clarity and precision, rarely found in speech or writing. It is this third kind of language that she used for the most part during her teaching; methodical signs, as useful as they could be to analyze syntax, remained too obscure for a continuous mode of communication and only confused deaf pupils. She explained that teachers must therefore adopt the language of their pupils, despite the breach in syntax that occurs. That is the only way to be fully understood and to convey historical, geographical, moral, religious, and civic knowledge to deaf pupils.

#### The Invention of the First Sign Language Grammar

A contest launched in 1854 by the Société centrale d'éducation et d'assistance pour les sourds et muets de France awarded a prize to the "author of a work the most likely to train teachers or any other person with a certain level of instruction to start the education of deaf pupils."<sub>61</sub> This prize led Valade to write his Etudes sur la lexicologie et la grammaire du langage naturel des signes [Studies on the Lexicology and Grammar of Natural Sign Language].<sub>62</sub> Quoting Bébian of the National Institute of Deaf-Mutes in the work's epigraph, Valade published what may be considered the first grammar of sign language. At first, the study received limited reception, but eventually the National Institute of Deaf-Mutes used it and did so for a couple of decades, as attested by the teaching programs as well as the work of Abbé Lambert, chaplain of the National Institute in Paris.<sub>63</sub>

Valade espoused Étienne Bonnot de Condillac's conception that

sign language is humankind's natural language, something that everyone owns and that has been transformed by culture and spoken languages. Aware that for sign language to be recognized as a proper language, one had to prove its capacity to emulate the complexity of written syntax, Valade defined the goal of such a grammar as "the research and development of the rules to which is subjected the painting of thought with gestures, for those deprived of the capacity to hear and speak."<sub>64</sub> Valade also hoped to create a dictionary, which he never completed; he had planned to analyze the kinds of words to choose and the order in which to compile them.

Valade insisted that "signs are merely tools of discourse, and he for whom the syntax has not taught their use not only could not converse by signs, but would have a very imperfect and vague idea of the genius of this language."65 He believed that several syntactical orders of language existed, and the differences between these orders, far from causing disorder and confusion, were the result of the distinct grammars ruling each language's construction. He insisted that syntax was extremely important to sign language, "to declare and arrange signs in the order the most appropriate to paint exactly to the eyes the real or imagined scene that memory or imagination traces."66 Analyzing sign language's backward construction, he remarked that hearing people speak and write in another order than the one they think in. Sign language, instead, arranges ideas in what he calls "the order of causality," starting with the situation, place, time, and circumstances, and only then describing what happened, in the order in which it happened.67 It also places qualifications after the signs they relate to. He compared sign language's organization to that of Latin. This comparison would appear again a few years later in an article by Harvey P. Peet, president of the New York Institution for the Deaf and Dumb, attesting to the scope of Valade's views.68 Stressing the point further, Peet emphasized: "The only question is, not what signs we shall use, but in what order we shall use them. We wish to teach our pupils, not the meaning only of individual words-here is the proper place for colloquial pantomime-but how to collocate these words in the order of written English [emphasis in original]."69 Twelve years later, Valade reasserted his position, quoting his own work in a discourse later translated in 1873 for the American Annals of the Deaf and Dumb, with introductory words by the editor declaring the similarities of the views since exposed in America.70 He would add, "It follows, therefore, that there are in mimic construction two very different things to consider: the order in which the signs succeed each other, and the relative positions in which they are made [emphasis in original]."71 By now, Valade was even comparing the construction of sign language to that of Chinese, quoting Leibniz's view on universal language to support his position.

One would not remember the order in which signs were performed, he says, but rather the picture that they drew. To the sense of linear order developed in words, then, Valade opposed the spatial position of signs. This explained why the order of gestural signs is not strict. It is the ability to present one's message in a vivid way that makes the quality of the message. The ordering of the visual signs in a limited visual space is the key to its clarity and to interlocutors' ability to remember it. Valade was in fact conceptualizing the difference between auditory language, made of words expressed with time, and a sign language expressed visually in space and time. While the order of the succession of gestural signs leaves few traces on the memory, their position in space will strike the interlocutor's mind. The picture resulting from their relative locations around the body remains in the mind and can be seen for a long time after they have been made.

Valade was the first writer to conceptualize the order of signs according to their different dimensions. He saw that their distinction was not merely limited to the strict succession of signs but to the conditions of their performance. By considering sign language and spoken languages separately, Valade offered a totally new understanding of sign language. It was not a linear language, like speech; it was a visual one. Thus its analysis could not be limited to the ordering of signs one after the other but to the composition they trace in space. Valade's radical approach led him to think starting from the very demands of the visual dimension of language. Since sign language not only allows but commands a different syntax, one cannot start with a detail, as with speech, but rather with the larger context in order to situate the action. Freeing sign language from French rules, his analysis could focus on sign language itself—he talks about the existence of signs that cannot be translated into French and that function only in sign language. Fully establishing the autonomy of the language, he sketches out a set of rules, indicating, for example, that sign language is limited to three tenses (past, present, future) and excludes gender, participles, conjunctions, and articles. Pointing with the index finger replaces pronouns, and active forms replace all passive forms. Valade not only established sign language's independence from any other language but revealed a coherence that set it far beyond any primitive character. In the light of linguistic battles over the last fifty years to ascertain whether, on the basis of national sign languages' visual dimensions, they have a syntax, it is most fascinating to see that such discussions, involving similar arguments, existed over 150 years ago.

If, with the primacy given to speech, they have been abandoned and forgotten, conceptions of the roles given to sign language in education abounded in the nineteenth century, providing contradictory potentials. At a time when establishing the teaching of national sign languages was still fragile, the analysis of these divisions expands our understanding of various possible developments of sign language for education. In fact, its potential for bilingual education was explored at a time when bilingual education was extremely rare. By shifting from a history of sign language in which it was frequently thought of as a language of resistance, or as a language whose very existence was under threat, to examining diverse views, this article hopes to show how much the construction of sign language results from complementary and opposing conceptual developments and an abundance of pedagogical and epistemological questions. In nineteenth-century France, the linguistic choices involved in the ordering of signs and the elaboration of sign languages included social and political positions far beyond the coherence of a system and the accessibility of a grammar and syntax. While the strategy of seeking recognition of sign language as its own language began in the 1960s by establishing similarities between sign language and spoken language, some nineteenth-century teachers valued sign language while at the same time denying that it possessed a "grammar" in the sense that spoken/written languages do. French sign language, in particular, is the fruit of complex layers intertwining philosophical conceptions of the role of sign in the invention of language, native users' conceptions, and pedagogical constructions from the latter part of the eighteenth century onward. Even though hearing teachers dominated the authoritative institutions, the language did not belong to them. The divide between those in favor of methodical signs and those in favor of sign language (be they natural signs or conventional signs, as Alleau preferred) did not follow the divide of the hearing versus the deaf.

While conceptualizing the linear order of signs to be used in French, the possible threats sign language posed to learning French, and the visual dimension leading to the ordering of signs in sign language, teachers of deaf pupils delved into far more than linguistic questions. In some ways, the opposition between advocates of different orders of signs resonates with today's opposition between partisans of speech and partisans of sign language. In both cases, the debate centers on prioritizing either the national spoken language or sign language and its specific syntax. What was at stake was the stability, reliability, and potential autonomy of sign language. Questioning the ordering of signs led to questions about sign language's role in the development of the mind and its authority as a language. Its ability to stand equal to French, which first appears with Valade's conceptualization, would only find full acknowledgment in 2005, when the French government passed a law establishing it as a language for education for which access must be facilitated.72 In that decade, other European countries also passed similar laws supporting sign language.

In the context of the invention of the cochlear implant, in the last forty years the teaching of language has been bound up with identity to the point that scholars have created a way to mark deafness—by using a capital D.This indicates a kind of nationhood made up of people who communicate via sign language, despite the diversity of national sign languages. A historical perspective shows that while sign language pedagogy was crucial for deaf people in the nineteenth century, it was not thought of in such exclusive terms.<sup>73</sup> While they developed a sense of nationhood strongly supported by deaf banquets, publications, and associations, deaf and hearing people might be advocates of both methodical signs and speech. In fact, despite the importance given to conceptions of the linguistic autonomy of the deaf community in the fashioning of "Deaf" identity, in nineteenth-century France the very richness of sign language development comes from its intersecting and absorbing quickly changing conceptions while opposing constructions of the natural, pedagogical, and linguistic role of signs in language. By reinforcing a binary opposition between the learning of sign language and the learning of speech, the current debate around the cochlear implant overlooks the richness of the diverse views that earlier teachers, deaf or hearing, shared. As we have seen, one's physiology did not define one's position toward language. It was in the possibility of adopting several points of view and in their flexibility that a full sense of emancipation resided. Identity politics did not define what one thought but instead opened up possibilities for creating diverse relationships to language and pedagogy and owning them fully as choices.