

Ludwig Noiré and the Debate on Language Origins in the 19th Century*

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1. *Introduction*

Linguistic naturalism was one of the main positions taken in linguistic research during the 19th century (for France, see Auroux 1984 and Desmet 1996; for England, see Aarsleff 1983; for Germany, see Knobloch 1988). Although the origin of language is a traditional question of linguistic reflection, linguistic naturalism paid special attention to this topic. According to Auroux (1989: 123), the 19th century was one of the most fruitful periods in the history of the question of language origins. And this notwithstanding the fact that the 19th century was also the epoch of the well-known official interdiction of that topic promoted by the *Société de Linguistique de Paris* (founded in 1866). Article 2 of its constitution states, “The Society does not admit any communication regarding language origins as well as the creation of a universal language” (cited after Auroux 1989: 123; transl. mine: JDA). The scepticism concerning that topic was not limited to France. In 1873 the president of Philological Society in Britain, Alexander John Ellis (1814–1890), declared the question of language origins to be “out of the field of philology proper” (cited after Aarsleff 1983: 230).

Such scepticism was almost certainly reinforced by the main goal of linguistics during the 19th century. Linguistics wanted to appear as a science and to strengthen its own academic position (see Auroux 1989). Questions of a more philosophical nature, such the origins of language, were officially left out. For instance, it should be recalled that the refusal of Neogrammarians to recognize the relevance of the question of language origins. Nonetheless, many linguists,

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anthropologists, psychologists, biologists and sociologists of the period were more or less interested in the issue of language origins. Thus the particular character of this interest in the 19th century, in comparison with other periods, consisted in the new purposes of linguistic sciences as well as its relatively new methods of research (for instance, see Rousseau 2000 for the *morphological revolution* of comparative linguistics; for a general introduction to linguistic research in 19th century, see Morpurgo Davies 1996). So the knowledge of the findings of the comparison between languages offered to many scholars and philosophers supports to speculate on the unique mother tongue as well as on the origins of language (for the awareness of both historical origin and development of languages see Formigari 1977, Gipper & Schmitter 1985, Gauger 1981: 22–28; Gauger 1991, Oesterreicher 1986, Auroux 2000). In addition to this, we have to take another factor into account. This is, as we will show, the new form that natural sciences took in the first decades of 19th century.

Among the scholars who tackled topics of this kind, the German philosopher Ludwig Noiré (1829–1889) deserves special mention (cf. Knobloch 1988: 139). Noiré's theory appears as one of the most eccentric in that Noiré linked language origins with collective labour. To him, the unique sociability of humans implies cooperation and in turn cooperation involves language. As will be seen below, Noiré set out that the slow evolution of human societies must be seen against the background of both psychological research on the origin of designation and linguistic and historical investigations into linguistic roots. And in this way, he tried to conciliate biology, psychology and history (cf. Marino 2008: 239).

Remarkably, Noiré's theory deeply influenced the debate on language origins until the 1950s at least. We will be very closely examining this aspect in the last paragraph of this paper. Before offering some theoretical and historical explanations for the enduring influence of Noiré's view, it is necessary to describe the general features of his theory and the context in which it arose. After dealing with the German-English debate on language origins during the 19th century, a section will be devoted especially to Noiré's theory of language origins. Finally, we will suggest a comparison between Noiré's insights and the naturalistic framework of the 19th century.

2. *The 19th-century debate on language origins*

In the 19th century, the debate on language origins was launched by scholars who argued for the assumption of the divine origin of human language. That theory took two forms. One of the most typical strategies regarded language as a gift of God and rejected the thesis that humankind could have created language without any help. This was the solution suggested by the German philosopher

Johann Georg Hamann (1730–1788).¹ According to other scholars, the problem of language origins lies not in the authority of Divine Word but in a theoretical *conundrum*. It is impossible to establish a coherent theory of the human origin of language. To invent language, our ancestors already needed to be intelligent. But to be intelligent, they needed to already have language. So, the only rational solution could be a non-human origin of language. Incidentally, the French philosopher Jean-Jacques Rousseau (1712–1778) sympathised with this account (cf. Rousseau 1755: 47–49).

In the 18th century the German mathematician Johann Peter Süßmilch (1707–1767) suggested a rationalistic and non-theological version of the theory of divine origin (see Süßmilch 1766). But this version was sharply criticised by the German philosopher Johann Gottfried Herder (1744–1803) in his *Abhandlung über den Ursprung der Sprache* (see Herder 1772). In the 19th century, the theory of divine origin of human language was supported by the French intellectual Louis-Gabriel-Ambroise de Bonald (1754–1840) in his *De l'origine du langage* (from his *Recherches philosophiques sur les premiers objets des connaissances morales*, 1818; cf. de Bonald 1818 [1845]: 99).

De Bonald's account stimulated the firm reaction of both the French philologist Ernest Renan (1823–1892) and the German linguist Jacob Grimm (1785–1863). In his *De l'origine du langage* (1848), Renan disputed De Bonald's theory (cf. Renan 1858 [1848]: 87, 98). But he criticised the Epicurean Theory equally by arguing that humankind never lived in a state of nature and never spoke a natural language composed of facial movements, gestural expressions and cries (cf. Renan 1858 [1848]: 74–79; see Bourdier 1978, Gensini 1999). For Renan (1858: 16) languages arose as a whole and not progressively. On the other hand, in his *Ueber den Ursprung der Sprache* (1851), Grimm reasoned that language evolved progressively (cf. 1858 [1851]: 30–31). Deeply influenced by Herder, Grimm reckoned that language and thought are interconnected and evolved simultaneously. At the same time, Grimm neglected any continuity between human language and animal communication systems.

In 1850, the German philosopher Friedrich Schelling (1775–1854) questioned Herder's theory (cf. Schelling 1959: 503–505). In a similar way, Schelling also questioned the capacity of linguistic sciences to support investigations into the origins of human language. Against Schelling, Grimm set out that recent progress in comparative linguistics allowed to reconsider the issue of language origins on a new basis (cf. Grimm 1858 [1851]: 5–8). In this manner, the origin of language

1. In the Old Testament, however, one cannot find any reference to the origins of human language: for the storyteller, language was one of the typical capabilities of humankind (see Albertz 1989).

must be regarded in line with the evolution of languages (cf. *ibid.*, p. 10). Thus, according to him, comparative linguistic plays a leading role in the field of historical and anthropological investigations into the origins of humankind (cf. *ibid.*, p. 58).

In his *Essay on the Origin of Language* (1860), the English theologian Frederic William Farrar (1831–1903) quoted both Grimm and Renan. According to Farrar, language is a strictly human product. Humankind has progressively created and developed it (1860: 31–32):

We conclude, then, that language is neither innate and organic; nor a mechanical invention; nor an external gift of revelation; – but a natural faculty swiftly developed by a powerful instinct, the result of intelligence and human freedom which have no place in purely organic functions.

Like Grimm, Farrar rejected the possibility of any continuity between animal communication and human linguistic skills (cf. *ibid.*, p. 12). But in opposition to Grimm, Farrar declared that the first words were essentially onomatopoeic (cf. *ibid.*, 97–115). These onomatopoeic words must be thought of as expressions of a subjective reaction under the pressure of passions and needs. Such reactions may follow external stimuli such as the sounds of nature. Thus human voice could subjectively interpret and express some features of things through sounds (*ibid.*, p. 63).²

Particularly interesting is the influence of Farrar's theory in the 19th century debate on language origins. In his *Dictionary of English Etymology* (1859), the English linguist and brother-in-law of Charles Darwin (1809–1892) Hensleigh Wedgwood (1803–1891) made extensive use of the principle of onomatopoeia and subjective iconism (see Piattelli 2014). The idea Wedgwood developed in his work built heavily on Farrar's research. In turn, Darwin was receptive of Farrar in his *Descent of Man* (cf. Darwin 1874: 86–87, 90–91, 94). But unlike Darwin, Farrar and Wedgwood did not assume any continuity between animal communication systems and human language (cf. Wedgwood 1866: 7).

Nobody can overlook the fact that not everyone accepted of the theory that language arose slowly. For instance, Renan questioned the validity of that insight (cf. 1858 [1848]: 16). To give just one further example, this criticism was also picked up by the German linguist and professor at Oxford University Max Müller (1823–1900). In his *Lectures on the Science of Language* (1861 and 1863), Müller regarded language as human faculty that arose in one fell swoop: “[...] language is

2. By the way, such a hypothesis had already been formulated by Leibniz in the third book of *Nouveaux essais sur l'entendement humain* (1765; for Leibniz, see Gensini 1991) and mentioned by De Brosses in his *Traité de la formation mécanique des langues* (1765; see De Palo 2005; cf. also Gensini 2014: 63).

the outward sign and realisation of that inward faculty which is called the faculty of abstraction, but which is better known to us by the homely name of Reason" (Müller 1899: 492). By quoting Humboldt's *Ueber das vergleichende Sprachstudium* (1820), Müller insisted that humankind and the faculty of language are inseparable (cf. Müller 1899: 480).³ Müller denied the gradual development of the language faculty: "[...] man could not by his own power have acquired the faculty of speech which, so far as our experience goes, is the distinctive character of man" (ibid.). To him, the error underlying this way of understanding human language had to be eliminated definitively. So Müller disagreed with Wedgwood's theory of onomatopoeia and objected that first words were neither instinctive cries nor other expressions of need (see Dowling 1982).

Interestingly, Müller did not totally disapprove of Darwin's theory of evolution (see, for instance, Müller 1877 I: xi; Müller 1899: 47). For Müller, Darwin's error was the assumption of the continuity between animal communication and cognition and human linguistic and conceptual skills (see Knoll 1986; see also Gensini 2011). Thus Müller wrote his 1873 *Lectures on Mr. Darwin's Philosophy of Language* in order to uncover and refute the linguistic implications of Darwin's theory. One year later, the American philologist William Dwight Whitney (1827–1894) took a contrary position to Müller in his *Darwinism and Language*. In Whitney's view language progressively arose rather than appearing all at once. Nonetheless, Whitney was partly disappointed by some of Darwin's conclusions. Specifically, Whitney rejected that the beginnings of human speech could be seen among pre-human ancestors. But he accepted that humankind descended from an animal ancestor (cf. Alter 2005: 183).

Specifically, Whitney's interpretation of Darwin's theory differed significantly from that of German Indo-Europeanist August Schleicher (1821–1868), who in the same years tried to apply the principles of Darwinism to linguistic science. But before his appraisal of Darwin's theory, Schleicher already regarded languages as law-governed, organic phenomena (cf. Koerner 1983: xxviii). Against this,

3. In Germany, the philosophy of language of Wilhelm von Humboldt (1767–1835) seems to play the main role in inspiring non-linear theories. Specifically, Humboldt stated that language constitutes the main feature of humankind as a natural species. Consequently, drawing links between animals and humankind would lead to a total misunderstanding of human nature. In his *Comparative Mythology*, Müller argued for the simultaneous origins of humankind, language, and reason: "As far as we can trace back the footsteps of man, even on the lowest strata of history, we see that the divine gift of a sound and sober intellect belonged to him from the very first; and the idea of a humanity emerging slowly from the depths of an animal brutality can never be maintained again". And thus: "We still speak the language of the first ancestors of our race" (Müller 1909 [1856]: 9–10). But one cannot dismiss the fact that, in the same pages, Müller suggested that the development of languages must be regarded as a gradual process of stratification.

Whitney argued that language escaped the law of nature as well as other actions guided by human will.

At this point we must say a few words concerning Darwin's theory, since it introduced in the debate on language origins certain elements which radically changed some aspects of the argument. In *The Descent of Man* (1871), Darwin suggested the continuity between animal communication systems and human language. The difference between them does not concern semantics (expression of desires and needs) or articulation of sounds (typical of a wide range of species of birds) but rather human "almost infinitely larger power of associating together the most diversified sounds and ideas" (Darwin 1874: 85–86). To Darwin, human language arose from the cognitive capability to fix experiences in sounds. In turn, complexes of sound and experience may amplify the range of actions and understanding. So conceived, Darwin consequently explains, language could progressively reinforce the cognitive skills from which it emerged (cf. Alter 2007, 2008 for details).

Deeply influenced by the British geologist Charles Lyell (1797–1875), who extended the traditional geological dating in his *Principles of Geology* (1830–1833), Darwin stated that humankind had evolved from preceding animal species. So our pre-human ancestor was "some unusually wise ape-like animal" who imitated sounds of nature thanks to voice and gestures. Darwin established that human language is rooted in pre-human communication systems. Such an assumption made a decisive impact on the debate on language origins. The argument no longer covered only the history of humankind. Not only did the debate face the issue of human-specific peculiar linguistic skills, it also tackled pre-humans forms of communication. One could say that Darwin reversed the terms of the debate by proposing a proto-linguistic turn. Obviously, not everybody was on Darwin's side. For example, as has been already seen, Whitney, Farrar and Wedgwood denied that human languages have any relation to animal or pre-human communication systems.

In addition, Darwin suggested that human use of voice has its natural roots in animal courtship. In this way Darwin overturned the theory set out by Herbert Spencer (1820–1903) in his *The Origin and function of music* (1858). To Spencer, music was an evolutionary product of language. By contrast, Darwin argued for the existence of some musical skills in nature, as had already been suggested by the German physiologist Hermann von Helmholtz (1821–1894).

To summarize, by virtue of the scientific support of his theory of evolution, Darwin's re-thinking of the problem of the origins of human language redefined the terms of linguistic naturalism (see Formigari 2013). In explaining why human language has a natural and inherited component, Darwin rehabilitated languages of other species. Accordingly, human language emerged progressively in

pre-human multimodal communication systems constituted by gestures and vocal imitation. Thus the first traces of language must not be seen only in the history of the *genus homo* but before. Finally, human language is a quantitative enhancement of some cognitive skills. At the same time language outperforms cognition. So there is a co-evolutionary loop between the former and the latter (cf. Ferretti & Adornetti 2012: 24).

3. *The German debate*

The influence of Darwin's theory on the German debate on language is best illustrated by the example of Schleicher's *Die Darwin'sche Theorie und die Sprachwissenschaft* (1863). Schleicher showed a desire to reconcile linguistics with the natural sciences. Specifically, Schleicher's well-known theory of the linguistic genealogical tree (*Stammbaumtheorie*, "family tree theory"; first suggested in his *Die ersten Spaltungen des indogermanischen Urvolkes* in 1853; see Schleicher 1853) depended upon the model of botany, geology, and zoology (cf. Koerner 1983: xxviii–xl). After reading Darwin's *Origin of Species* (1859), Schleicher argued that languages evolved because of competition. For him, languages necessarily pass through a life cycle similar to organisms. Schleicher also asserted that languages are initially simple and become progressively more complex.

Schleicher's theory was often mentioned by natural scientists of his period. For instance, the English geologist Lyell in his *The Geological Evidences of the Antiquity of Man* (1863) cited Schleicher's theory to explain the development of languages (see Taub 1993; for the relation between 19th century geology and philology, see Craig 1983 and Naumann et al. 1992). Furthermore, Darwin cited Schleicher's theory of languages as natural organisms in the *Descent of Man*. But Darwin's more general linguistic account differed in fundamental ways from Schleicher's (see Maher 1983). Darwin argued for gradual origins of language from pre-human ancestors until actual humankind, but Schleicher narrowed this down. To him, language arose with humankind during the pre-historical era (cf. Schleicher 1848: 14).

The same disagreement with Darwin's theory of language origins could be seen in Noiré's theory. Like Schleicher, Noiré quoted Darwin's findings with admiration. But he did not entirely agree with Darwin's linguistic views. Noiré set out his theory in a book entitled *Ursprung der Sprache* (1877; for expatiation, see the next paragraph). The major premise of Noiré's book is that language arose gradually. But the minor premise is that only humankind had the skills for creating language. According to Noiré, the necessary skills for creating language did not depend upon rationality. For him, language arose as a result of the unique sociability of humans.

To some extent, Noiré's theory assumes that humankind has a natural origin. Consequently, our ancestors naturally invented language. Nonetheless, the deep difference between human language and animal communication systems consists in the unique sociability of humans. This fact implies at least two consequences. First, human language represents a new stage in the history of animal languages. Secondly, human language uniqueness is embedded within a peculiar feature of humankind. More narrowly, Noiré identified such a feature in cooperation. The unique sociability of humans implied an unprecedented form of cooperation already at an early stage of human development. To simplify, before speaking our ancestors already cooperated to achieve common ends.

Language, Noiré consequently declared, arose in the context of cooperative tasks. Under the pressure of those tasks, physical efforts involved involuntary exclamations. Over time these involuntary vocalisations became shared and recognised by the group. They originally mean some aspects of the action. So involuntary vocal emissions uttered during cooperative tasks could be regarded as the first words of human language.

In the same years, other German linguists did not accept Darwin's proto-linguistic turn. This is the case of Heyman Steinthal (1823–1899). Deeply influenced by Humboldt's philosophy of language, Steinthal refused to consider human language as a developed form of pre-human communication systems (cf. Steinthal 1851: 15). To him, the solution of the question of language origins did not depend upon the findings of comparative linguistics but rather on psychological research into atemporal properties of human soul (cf. *ibid.*, p. 14). But it should be remembered that Steinthal adopted some aspects of Darwin's theory in the third (1877) and fourth edition (1888) of his *Der Ursprung der Sprache*. Specifically, Steinthal went so far as to suggest that searching for the origin of language could prove that humankind descended from animals (see Agard 2004: 131–148).

To Steinthal, however, human language is irreducible to other communication systems (cf. Steinthal 1888: 353). He also refused the linguistic evolutionary theory of Schleicher (see Pénišson 1998). Specifically, Steinthal accepted only the possibility of creating the taxonomy of languages, but nothing more than this. Steinthal argued for the indissoluble link between humankind and language. And to him, the origin of language must be conceived of in conjunction with the progressive origin of consciousness (see Christy 1989). In his *Abriss der Sprachwissenschaft*, Steinthal (1881: 361) reasoned that vocal reflexes could be the precursors of speech and articulated sounds. According to him, any psychical excitation corresponds to involuntary reflected bodily movement. Thus speech was originally involuntary *Reflexbewegungen* “reflex-movements”. As a matter of fact, voice had the function of motor and mechanical externalization of perceptions and experiences. For this reason, Steinthal labelled voice *Reflexlaut* “reflex-sound”. Communicative

intentionality arose later. It controls expressions performed independently from communication.

Among other scholars, the German sociologist Georg Simmel (1858–1918) also marked the limits of Darwin's theory of language origins. Simmel wrote for the journal *Zeitschrift für Völkerpsychologie und Sprachwissenschaft*, which was founded by Steinthal and Moritz Lazarus (1824–1903). In his article "Psychologische und ethnologische Studien über Musik" (1882), Simmel sharply criticised Darwin's theory of the musical origins of human language (see Agard 2004: 131–148). Such a theory had more recently been endorsed by the German zoologist Gustav Jäger (1832–1917).

To sum up, the first two paragraphs of this paper have described the way in which Darwin's theory of language origins and in particular his assumption of the continuity between human language and pre-human communication systems had not always been completely accepted in Great Britain or Germany. Of course, many scholars were ready to defend a naturalist account which excludes any transcendental cause of language origin. But there were not many scholars that firmly argued for the theory of animal origins of language.

4. *Noiré's theory of language origins*

Noiré's *Ursprung der Sprache* begins with a quotation from the German philosopher Lazarus Geiger (1829–1860). Interestingly, Geiger did not simply assume the coincidence of *Sprache* "language" and *Vernunft* "reason" as Humboldt had done. Geiger (1868: Vorrede) also claimed the primacy of language over thought: "Die Sprache hat die Vernunft erschaffen, vor der Sprache war der Mensch vernunftlos [Language has created reason, before language man was without reason]".

Before coming to the core of Noiré's considerations, we must briefly describe Geiger's theory. The reason for this digression is the fact that Noiré said that he was deeply influenced by Geiger. But Geiger's theory has been often treated in same way as Noiré's after the publication of Noiré's *Ursprung der Sprache*. Nonetheless, Noiré felt a certain dissatisfaction with Geiger's theory even if he acknowledged the significant findings of his predecessor.

In 1868 and in 1872 Geiger published the two volumes of his *Ursprung und Entwicklung der menschlichen Sprache und Vernunft*. In the period between the publication of the first volume and the second one, he wrote a smaller essay devoted to the same topic (Geiger 1869). In essence, Geiger suggested that our human ancestors were speechless, helpless, and without religion, art, and morals. Language arose from gestures which originally were as insignificant as *Sprachschreie* "trifling cries" (i.e., interjections). Those cries expressed emotions without purpose or consciousness. For a long time, sounds varied and differentiated. In the meantime,

sounds allowed our ancestors to reinforce their familiarity with the world and consequently prepared for the first steps of reasoning. Imitative skills peculiar to humankind had been the precondition for sharing sounds among our ancestors. Thus they began to understand each other and sounds gradually became meaningful. Consequently, Geiger argued that such sounds were the first linguistic roots.

Noiré's book is deeply influenced by the linguistic reflections of Herder, Humboldt and Geiger. As a matter of fact, their names appear on the first page of Noiré's *Ursprung der Sprache*. Indeed Noiré agreed with them by assuming that reason is the peculiar feature of humankind and reasoning cannot be possible without language. Accordingly, Noiré merged the question concerning the origins of humankind and reason with the issue of language origins. It is quite interesting that Noiré juxtaposed the names of Herder, Geiger and Humboldt (for more details, see Marino 2008:332–396). On the one hand, Herder and Geiger developed two theories of language origins which were based upon the assumption of the gradual origin of human language. On the other hand, Humboldt refused to consider language origins as a meaningful question. To him, humankind and full-formed languages are indissoluble. The common ground that Noiré sees in the linguistic theories of Herder, Humboldt and Geiger is probably their strong naturalism as well as their thesis of language-thought relation. Despite essential divergences concerning the relation between humankind and other animals, Noiré appropriated Humboldt's theory of language as a *Denkorgan* "thought-instrument" and thus he highlighted the correlation between language, reason and human nature.

What Noiré considered his own contribution to the debate on language origins was his assumption that language (and reasoning, of course) originally arose during social goal-oriented actions. So he wrote: "Es war die auf einen *gemeinsamen Zweck* gerichtete *gemeinsame Thätigkeit*, es war die *urälteste Arbeit* unserer Stammeltern, aus welcher Sprache und Vernunftleben hervorquoll [Language and life of thought arose in the context of *shared and common goals* posed by *common action*, that was the original *work* of our ancestors]" (Noiré 1877:331). Our human ancestors lived like animals and tried to survive in wild nature. For this reason they worked together to produce their means of subsistence. Their common activity was mostly physical. So during their common efforts they produced some involuntary sounds. The peculiar feature of these sounds was the fact that they were the same for all of the members of the group. Hence, these *gemeinsame Laute* "common sounds" originally had social value.

According to Noiré, the same involuntary sounds were uttered during the collective actions. This fact implies that these sounds were recognised and understood as meaningful by all of the members of the group. Noiré (1877:332) explained this point in the following manner:

Hier ist also der Ursprung des Lautes, der, gemeinsam erklingend, gemeinsam hervorgebracht, gemeinsam verstanden, nachmals zum menschlichen Worte sich entwickelte. Denn seine Eigentümlichkeit war und mußte bleiben, daß er an eine bestimmte Thätigkeit *erinnerte* und *verstanden* wurde [Here one can find the origin of [linguistic] sounds. Sounds resounded together, they are performed together, and they are understood by all [of the members during their common efforts]. Thereafter, these sounds turned into human words. Indeed, the peculiar feature of [linguistic] sounds was and had to remain the fact that sounds has been *recognized* and *understood* by meaning a given action].

Noiré called *Gemeingefühl* a common and pre-linguistic sentiment of shared goals and intentions. This sentiment accompanied peculiar human cooperation. At the same time, *Gemeingefühl* should pave the way for understanding intentions of the others and what the others would communicate. Consequently, Noiré (1877:333) underlined how *Gemeingefühl* ensured social character of primitive sounds: “Der Sprachlaut ist also in seiner Entstehung der die *gemeinsame Thätigkeit* begleitende Ausdruck des *erhöhten Gemeingefühls* [With regards to its origin, linguistic sound is moreover the expression of the *most elevated common sentiment* which follows a *common action*]”. Accordingly, Noiré (1877:334) argued for the priority of *Collectivwesen* “social being” over individuals. Noiré (1877:323) quoted Ludwig Feuerbach’s (1804–1871) *Philosophie der Zukunft* (1843) with regard to the social dimension of thought: “die Gemeinschaft des Menschen mit dem Menschen ist das erste Prinzip und Kriterium der Wahrheit und Allgemeinheit [The community of humans with humans is the first principle and criterion of truth and general]” (Feuerbach 1843:152). In a similar way, Schopenhauer (1819 [1988]: 42) highlighted the link between language, sociability, and practical life: “Durch Hülfe der Sprache allein bringt die Vernunft ihre wichtigsten Leistungen zu Stande, nämlich das übereinstimmende Handeln mehrerer Individuen [Reason accomplishes its greatest feats only by means of language: the co-ordinated action of many individuals]” (for the English translation, cf. Schopenhauer 2010:60; cf. also Noiré 1877:37; in the previous century, Lord Monboddo already set out that the origins of language are connected to cooperation: cf. Formigari 1973:52).

Assuming that *Gemeingefühl* was a psychological condition for having mutual understanding of sounds, Noiré (1877:341) explained the way in which first linguistic roots designate the objective world (cf. also Noiré 1877:90–91). On each occasion, Noiré described sounds in their connection with goal-oriented social activities. Interestingly, sounds were emitted during the same actions: certain sounds constantly corresponded to the same action. This allows, in Noiré’s view, the stability of reference. Further, sounds designated things as the object of actions. To Noiré (1877:342; see also Noiré 1885:135, 143), first words originally designate action (*Verbum*) and patient (*Objekt*) at the same time (as Geiger 1868:386; cf. also

Steinthal 1888 [1851]: 295). Thus they did not match any established *pars orationis*. In this way, according to Noiré, the findings of comparative linguistics shall be subject to a more general anthropological account (Noiré 1877: 101–102, 107–110).

Cassirer (1980: 286) noted that for Noiré, “the original sounds originated not in the objective intuition of substance but in the subjective intuition of action”. Actions modified objects and allowed our ancestors to designate them. So designation presupposes social relations and cooperation. As Cassirer (1980: 286) notes, “if the phonetic sign had merely expressed an individual representation produced in the individual consciousness, it would have remained imprisoned in the individual consciousness, without power to pass beyond it”. In Noiré’s view, it is important to emphasise that the social nature of linguistic sounds is the unique feature which distinguishes human language from animal communication. Assuming that primordial linguistic sounds depend upon social context, they could change historically. By contrast, animal cries are uttered independently from social context and do not change over time. In this respect a remark concerning Geiger’s theory is necessary to better understand Noiré’s strategy. Indeed, Geiger (1869: 184–185) had been more open than Noiré to accepting the continuity between animal communication and human languages. For Geiger, the latter is rooted in the former.

5. *Noiré and the debate on language origins. An overview*

Starting from a preliminary overview of the debate on language origins that took place during the 19th century, it is possible to see some implications of Noiré’s theory. Firstly, Noiré, in the same way as other scholars (Renan, Grimm, Wedgwood, Whitney, etc.), rejected the divine origin of language and suggested a naturalistic account without invoking transcendent causes.

Secondly, like Farrar, Whitney, Steinthal and others, Noiré argued for progressive origins of human language. Unlike Müller, Noiré did not propose that language arose in one fell swoop. Nonetheless, like many others, Noiré was unwilling to accept any relation between human language and pre-human communication. This point led him away from Geiger’s theory as well as from Darwin’s.

Thirdly, in spite of Schleicher, Noiré refused to reduce language to a law of nature. For him, language opens the dimension of culture and history. But like Steinthal, Noiré considered original sounds as involuntary and non-communicative expressions. But like Steinthal, the link between those sounds and bodily movement is for Noiré not enough to establish reference. Reference needs previous social relations.

Taking his cue from Herder, Geiger, Humboldt, and Feuerbach, Noiré was increasingly concerned with a definition of humankind as a social, linguistic and

rational animal. This led him to suggest a theory of language origins which implied the co-evolution of language and reason in the context of goal-oriented cooperation.

As he implicitly demonstrated through an analysis of language origins, Noiré (1877:342) rejected the most common theories concerning this topic. He distanced himself from the theory of onomatopoeia (Farrar and Wedgwood). Somehow, the same fate seems to have befallen Steinthal's theory of reflex-sounds. Noiré criticised Darwin's theory of imitation as well as Geiger's theory of pantomime. According to Noiré, all of these theories cannot account for the social context in which language arose.

It would now be useful to quote some lines from Darwin's *Descent of Man*. This quote may serve to establish a further comparison between Noiré and another philosopher who suggested a theory of language origins close to Noiré's.

Darwin (1874 II, p. 295) mentioned the English philosopher Chauncey Wright (1830–1875) and his hypothesis according to which “the continued use of language will have reacted on the brain, and produced an inherited effect; and this again will have reacted on the improvement of language”. Assuming Darwin's theory of evolution in his *The Evolution of Self-Consciousness* (1873), Wright (1873:217) declared that language “would spring from the social nature of the animal, from the use of mental communication between the members of a community, and from the desire to communicate”. Accordingly, Wright argued that language was rooted in the social life of our pre-human ancestors. In Wright's view, language was originally composed by gestures and cries. The most fundamental linguistic function was communication. After the repetitive use of primitive signs, the *meditative* function of language arose and allowed memory, reflection and thought (see Pasqua Mocerino 2014).

Like Noiré, Wright reckoned that reason and language are interdependent. More significantly, both of them argued for the primacy of language over reason. In the same way, they suggested that language arose in social context. So Wright and Noiré concluded that humans think because they speak and not vice versa. Like Wright, Noiré explained that self-consciousness arose after the invention of language.

But the theory Noiré proposed only appears to resemble Wright's. Firstly, Noiré (like Müller) described our human ancestors as physiologically and anatomically like us. The only difference between actual and past humankind concerns language and cognition. Thus the origin of language is to be located among our human ancestors. On the contrary Wright argued for a more Darwinian view. For him, between human and pre-human language there is merely a difference of degree. Secondly, for Wright language arose under the pressure of the need to communicate. Against this, Noiré highlighted that communication is a more recent function of linguistic sounds.

In this way, it would be useful to remember that Noiré was deeply influenced by the thought of his friend Müller.⁴ Above all, like Müller, Noiré suggested a kind of evolutionism without considering human language as the result of the development of animal communication systems. Nonetheless, Noiré focused on sociability and cooperation more than Müller. And this is Noiré's most significant contribution to the debate on language origins. But we cannot dismiss the fact that Müller was deeply influenced by Noiré's philosophical and linguistics thought. In his *Lectures On The Origin And Growth Of Religion* (1882; cf. Müller 1901: 188–193), Müller adopted Noiré's theory almost in its entirety. And in his *The Science of Thought* (cf. Müller 1877: 273–322), Müller largely analysed Noiré's theory.

6. *Conclusions and further perspectives*

According to Müller (1877), Noiré's great merit was to neutralise certain risks involved in the Darwinian naturalisation of humankind. Even if Noiré suggested a Darwinian theory of language origins in his *Die Welt als Entwicklung des Geistes* (1874; cf. Noiré 1874: 254–255), he substantially reconsidered his assumption in his following writings. Specifically, he asserted that first roots cannot be seen as the result of animal warning calls but rather must be seen as involuntary interjectional sounds which mean some aspects of conscious experience. Humans have a property that they have not inherited from other animals, namely the ability to be conscious of their own creative actions.

Some eminent figures had debated Noiré's naturalism at length. In his *Die Principien der Wärmelehre* (1896), the Austrian philosopher Ernst Mach (1838–1916) criticised the way in which Noiré had argued for the essential and deep difference between humans and other animals. In the second volume of his *Beiträge zu einer Kritik der Sprache* (1901–1902), the Austrian philosopher Fritz Mauthner (1849–1923) criticised Noiré's anthropocentrism (cf. Mauthner 1912 II: 695).⁵ In 1888, the Belgian economist Émile de Laveleye (1822–1892) published his travel

4. The friendship between Noiré and Müller was very close. Müller dedicated his *Science of Thought* (1887) to Noiré. In turn Noiré shows great respect for Müller in his *Die Welt als Entwicklung des Geistes* (Noiré 1874: 246) and in his *Max Müller und die Sprach-Philosophie* (Noiré 1879a, b). Noiré's theory also influenced some Müller's linguistic works. For instance, in his *Das Denken im Lichte der Sprache* (Müller 1888: 371, 571), Müller reduced the roots of Sanskrit to a limited number of simplest human activities. Noiré (1877: 311, also cf. 341) argued for the same assumption (for this point cf. Cassirer 1980: 266). Finally, Müller (1888) is dedicated to Noiré.

5. Against that, in his *Ursprung und Vorgeschichte der Sprache* (1946) the Hungarian psychologist Géza Révész (1878–1955) described Noiré's theory as an example of an approach which was in contrast to theories that described language without taking into account the genetic relation to animal communication.

memories *La Péninsule des Balkans* where one can read a transcribed dialogue which the author had had with Noiré in Würzburg (cf. de Laveleye 1888:8–18). Noiré repeatedly criticised every kind of materialism and invoked Immanuel Kant (1724–1804) and Arthur Schopenhauer (1788–1860) to support his own approach:

Comment, à côté de l'absolue nécessité de la nature ou de l'omnipotence divine, y a-t-il place pour la personnalité et pour la liberté humaine? C'est ce que personne, ni chrétien, ni naturaliste, n'a pu nous dire. [...] Le premier mortel qui ait abordé cette question sans frayeur et qui y a trouvé une réponse satisfaisante, c'est Kant. [...] Kant nous a fourni la seule arme avec laquelle on peut combattre le matérialisme; il est temps de nous en servir, car cette détestable doctrine mine partout les fondements de la société humaine. Ce qui me fait révéler le nom de Schopenhauer, c'est qu'il a donné à la vérité révélée par Kant une expression plus vivante, plus pénétrante [How, besides the absolute necessity of nature or divine omnipotence, is there the possibility of personality and of human freedom? This is what no one, neither Christian nor naturalist, has been able to tell us. [...] The first mortal who approached this question without fear and found a satisfactory answer is Kant. [...] Kant has provided us with the only weapon with which one can fight against materialism. It is time to use it because, everywhere, this detestable doctrine undermines the foundations of human society. What makes me revere the name of Schopenhauer is that he has given the truth revealed by Kant a more lively, more penetrating expression]. (from de Laveleye 1888: 11)

To Noiré, indeed, the world must be seen as the manifestation of a principle that takes many different shapes (*Wille* “will”, *Kraft* “force”, struggle for life, *bellum omnium contra omnes*, etc.). To him, the Will oriented our human ancestors to collective goal-oriented activities and fundamental signs showed that power (see Arréat 1887). According to Schopenhauer, we are aware of our willing as well as of the willing of every being (cf. also Noiré 1877:376). Thus, to Noiré, among our ancestors, the consciousness of the efforts performed during repeated collective cooperative activities was associated with rhythmical utterances caused by those muscular efforts. This is the source of the first linguistic roots.

We have placed Noiré's theory in the context of the 19th century and we have also described the way Noiré saw language and languages as parts of practical activities of human communities. To him the study of language(s) must be conducted against the background of a monistic anthropology which is based upon substantial metaphysical assumptions. That anthropology does not neglect the natural origins of humans and the fact that they are subject to the laws of nature. But Noiré also argued for the human specific way of existence. For instance, we cannot deny the importance Noiré attached to the collective production of tools in his *Das Werkzeug und seine Bedeutung für die Entwicklungsgeschichte der Menschheit* (1880). To him, the early production of tools depended upon language

and reason (“*nur auf dem Boden von Vernunft und Sprache*”, cf. Noiré 1880: vii). De Laveleye (1888: 9) stated that

Noiré rattache l'origine de l'outil aux origines de la raison et du langage. Au début, si haut que l'on remonte, l'homme a dû agir sur la matière pour en tirer de quoi se nourrir. Cette action sur la nature, dans le but de satisfaire le besoin, c'est le travail. [...] L'effort pour se procurer l'utile développe le raisonnement et bientôt nécessite l'emploi de l'outil. Partout où l'on trouve trace de l'homme préhistorique l'outil de silex se rencontre. Ainsi la raison, le langage, le travail, l'outil, toutes ces manifestations de l'intelligence capable de progrès ont apparu et se sont développées en même temps [Noiré links the origin of the tool with the origins of both reason and language. At the very beginning, going back in time, humans had to act on matter to get food. This action on nature, in order to satisfy the need, is work. [...] The effort to obtain the benefit develops the reasoning and soon requires the use of the tool. Wherever one finds the traces of the prehistoric man, the flint tool is found. Thus reason, language, work, tool, all these examples of the intelligence – which enables us to make progress – appeared and developed at the same time].

The *raison d'être* of Noiré's anthropology was the integration of philosophical investigations and linguistic research. To Noiré, language is not an autonomous self-regulating system and the community as a whole must be seen as the maker of language. The formation of language and the evolution of languages, converge at one point: language is not a specific faculty but rather a social product, or rather a historical co-product of collective activities. The philosophical question of the nature of human thought must be integrated with comparative and historical linguistics which focused on the first roots of languages. To Noiré, as a matter of fact, concepts are essentially embodied in sounds, thus he suggests the simultaneous origins of concepts and roots.

As we have shown, Noiré's theory was at the crossing point of several topics that characterised the debate on language in the 19th century which partially depended upon the one of the 18th century (cf. Haßler & Neis 2009: 25–48): the relation between linguistics with other fields of research and in particular natural sciences (see Schmidt 1989), the formation of speech and the evolution of languages (see Baggioni 1986), the line between natural and cultural essence of humans, animal communication systems, etc. In this way, the analysis of Noiré's glottogonic model could highlight new perspectives that are of particular interest with respect to old themes such as the debate on the origins of language.

A detailed account of the history of the debate on language origins still needs to be written. And this account should address the reasons for the success of Noiré's theory. As a matter of fact, for over a century, Noiré's theory was mentioned by several scholars from several disciplines and fields of research. Interestingly, they

did not always share the same assumptions and they did not always evaluate Noiré's theory in the same way. The task of further research should be that of analysing the strategical and theoretical value of Noiré's theory in the 20th century. In the following lines, we will list some examples in order to suggest the main trends of the reception and transformation of Noiré's glottogonic model.

As has been seen, Noiré explicitly professed to be a great admirer of Kant and Schopenhauer. Noiré's post-Kantian approach had been understood by the German philosopher Ernst Cassirer (1874–1945) in the first volume of his *Philosophie der symbolischen Formen* (1923–1929). Cassirer's engagement with Noiré's theory was intimately related to Cassirer's attempt to develop a kind of symbolic interpretation of the transcendental account of Kant. In this way, Noiré's theory has been regarded as an approach which explained the intersubjective value of symbols. And it is no coincidence that Noiré had been also viewed as a supporter of idealism by the Russian linguist Lazar' Osipovič Reznikov (d.1970) in his *Langage et société* (published in France in 1949 but originally published in the USSR in 1947).

The German philologist Karl Borinski (1861–1922) was one of the first scholars who merged Noiré's theory of language origins with the theory of music set out by the German economist Karl Bücher (1847–1930) in his *Arbeit und Rhythmus* (1899; cf Borinski 1911: 15–16). To Bücher, our ancestors coordinated their shared cooperative activities by way of rhythmical bodily movements, singing, and other vocalisations (the so-called *Naturlaute* "natural sounds"). But we must remark that, according to Bücher, the pragmatic value of both, bodily movements and vocalisations, cannot be reduced to the cognitive function of first linguistic roots as Noiré's had described them.

Among linguists, Otto Jespersen (1860–1943) mentioned Noiré's theory quite favourably. In his *Language; Its nature, development and origin* (1922), Jespersen appreciated how Noiré had emphasised the role of the social dimension to explain the origins of language (Chapter XXI). Russian linguists such as Valentin Nikola'evič Vološinov (1895–1936) and Nilolaj Jakovlevič Marr (1865–1934) alluded to Noiré's theory to anchor language in collective activities among our ancestors (cf. Velmezova 2007: 387; Thomas 1957: 113; Smith 1998: 87); for the Russian debate on language origins, see Bertrand (2002), Brandist & Chown (2011), Čugunnikov 2005; Sériot 1986 and 2005).

Noiré's emphasis on labour and society was very warmly welcomed by the first generation of Russian Marxists (cf. Plexanov 1976 § vii; Bogdanov 2015: 14–20; Buxarin 1925, Chapter 6d). One of the main concerns of Russian Marxism was to establish a clear view of the relation between economic base and superstructures (cf. MEW XIII. 1–11). In this context, the origin and nature of language played a

substantial role (cf. MEW III, p. 31).⁶ Interestingly Noiré's description of the way humans interact with the surrounding environment was appreciated by conservative anthropologists too (see Gehlen 1940; cf. also Marino 2008: 332–395).

Noiré's theory provided fertile ground for French psychologists who wanted to propose hypotheses on the common source of thought and actions (cf. Ombredane 1933: 366; see also Delacroix 1924; Janet 1934; Noiré's theory has been ascribed to Janet's one by Piaget 2002: 206 and Foulquié 1945: 228).

It seems quite relevant that one of the last times Noiré's theory was mentioned was in the late 1970s (see Hewes 1978). Since the 1980s new models spread incredibly quickly and displaced Noiré's theory completely. But in recent years, some scholars have started employing such notions as joint attention, cooperation, shared attentional frame, tool-making, etc., to explain how language emerged during collective activities (e.g., see Burling 1999, Gärdenfors 2003, Osvath & Gärdenfors 2005, Spelke 1990, 2000; Tomasello et al. 2005, Arbib 2005, Stout et al. 2008, Bickerton 2009). Since these modern scholars justify their theories by way of new scientific findings, Noiré's theory has obviously lost its appeal. But the fact cannot be ignored that, following the examination of Noiré's culturalistic approach and both its reception and transformation, crucial issues in current debates on the Darwinian heritage as well as on the naturalisation of linguistic sciences could be called into question.

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6. Probably Noiré's theory was appreciated by Marxists because the theory of language origins set out by Engels in his *Anteil der Arbeit an der Menschwerdung des Affen* (cf. MEW II, 444–455; written in May–June 1876, firstly published in 1895 by the German review *Die Neue Zeit* n. 6; actually it is the ninth chapter of the *Dialektik der Natur*) started to be largely known after the publication of the *Dialektik der Natur* in 1925 (cf. MEW II, 305–670). But nobody can dismiss that Engels' theory of the origins of language differed from Noiré's substantially. In fact, to Engels language arose among a particular highly-developed race of anthropoid apes who made tools and needed a means of communication.

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SUMMARY

Among the scholars who tackled the topic of language origins in the 19th century, the German philosopher Ludwig Noiré (1829–1889) deserves special mention. To him, the unique sociability of humans implies cooperation and cooperation in turn involves language. Remarkably, Noiré's theory deeply influenced the debate on language origins until the 1950s. Before offering some theoretical and historical explanations for the enduring influence of Noiré's theory, it is necessary to describe the general features of his theory and the context in which it arose. After dealing with the German-English debate on language origins during the 19th century, a section will be especially devoted to Noiré's theory of language origins. Finally, a comparison between Noiré's insights and the naturalistic framework of the 19th century is provided.

RÉSUMÉ

Le philosophe allemand Ludwig Noiré (1829–1889) mérite une mention spéciale parmi les savants qui ont abordé le sujet des origines du langage au XIXe siècle. Pour lui, la sociabilité qui caractérise l'être humain implique la coopération et, à son tour, la coopération implique le langage. Il est à remarquer que la théorie de Noiré a profondément influencé le débat sur l'origine du langage jusqu'aux années 1950. Avant de donner quelques repères théoriques et historiques afin d'expliquer l'influence durable de la théorie de Noiré, il est nécessaire de décrire les traits généraux de sa théorie et le contexte dans lequel elle est née. Après avoir abordé le débat anglo-allemand sur l'origine du langage au XIXe siècle, une section sera consacrée à la théorie de Noiré. Enfin, nous proposerons une comparaison entre la théorie de Noiré et le naturalisme du XIXe siècle.

ZUSAMMENFASSUNG

Unter den Forschern, die im 19. Jahrhundert das Thema der Ursprünge der Sprache in Angriff nahmen, ist der deutsche Philosoph Ludwig Noiré (1829–1889) besonders erwähnenswert. Seiner Meinung nach setzt die einzigartige Geselligkeit der Menschen Zusammenarbeit voraus. Diese wiederum setzt die Entwicklung der Sprache voraus. Bemerkenswerterweise übte die Theorie von Noiré einen bedeutenden Einfluss auf die Sprachursprungsdebatte bis zu den 1950er Jahren aus. Bevor wir einige theoretische und historische Erklärungen für den dauerhaften Einfluss von Noirés Theorie anbieten, ist es notwendig, die allgemeinen Merkmale seiner Theorie und den Kontext, in dem sie entstanden ist, zu beschreiben. Nach der Darstellung der deutsch-englischen Sprachursprungsdebatte im 19. Jahrhundert wird ein Abschnitt besonders der Sprachursprungstheorie Noirés gewidmet. Schließlich wird die Sprachursprungstheorie Noirés vor dem Hintergrund des Naturalismus des 19. Jahrhunderts diskutiert.

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