New insights on Lithuanian accentuation from the unpublished manuscripts of Ferdinand de Saussure (1857–1913)[1]

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At his death, the great linguist Ferdinand de Saussure (1857–1913) left a considerable amount of papers, drafts and documents, some of them dealing with the Lithuanian language. Only in 1996 were they given to the public library of Geneva. The aim of this paper is to present some of the new insights offered by these unpublished documents in the field of Lithuanian accentuation. The majority of the documents pertaining to Lithuanian accentuation were written by Saussure over a time span of almost ten years between 1888 and 1896 in Paris and Geneva; some of them are later notes from a course on the Lithuanian language given by Saussure in 1901–1902 in Geneva. These manuscripts shed some light on a research field that still remains a relatively neglected part of Saussure's scientific production. They bring new insights on crucial issues such as the origins of the Lithuanian intonations or the Baltic metatony.

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1. Introduction

It is well known that Ferdinand de Saussure (1857–1913), who is usually considered one of the most outstanding figures of modern linguistics, devoted an important part of his research work to the Lithuanian language. Among his published articles, four important contributions concern issues of Lithuanian linguistics, two of them dealing with the highly intricate problem of Lithuanian accentuation (1894 and 1896). In this particular area, Saussure undoubtedly played a crucial role: his two seminal papers of 1894 and 1896 influenced all later research work. One might even say that their impact has not

yet been rightly evaluated up to now. As is well known, Saussure published very few articles and, after his untimely death in 1913, left a considerable amount of papers, various personal documents, drafts of already published articles, notes for courses at the University of Geneva, or even fragments of books he planned to write, but decided not to finish. Some of these papers were given to the public library of Geneva (BPU, now BGE). But an important part of these archives remained until very recently still in the hands of Saussure's family in the orangery of the famous house of La Tertasse in Geneva. Only in 1996 did these documents come to the public library of Geneva, and it is only since the first years of our century that they have become available to most of the scholars working on Saussure. My attention was drawn to these documents in May 2008 by Claudia Mejía Quijano, who is one of the most authoritative experts on Saussure's life and thought. My aim here is to give a first glimpse of these unpublished documents in the field of Lithuanian accentuation.

My first step will be a brief overview of Saussure's life in order to show to what extent and especially at what time Lithuanian linguistics played a role in his scientific career. In addition, I will present some of the new documents brought in 1996 into the library of Geneva. Then I will discuss Saussure's contributions to Lithuanian accentuation in more precise terms than is usually done. Finally, I will outline the impact of Saussure's works on later research, focusing on debates that have been very active over the 20th century and since. It goes without saying that such a first glimpse can only be provisional, since my work on the unpublished manuscripts of Saussure is still in progress.

In a somewhat oversimplified way, one could divide Saussure's life into three parts. The first part corresponds to his intellectual formation from his birth in Geneva (1857) to the end of his studies in Leipzig in the summer of 1880. Over this time span, Lithuanian linguistics and philology had been making significant progress, beginning with the early works of Georg Nesselmann (1851) or August Schleicher (1856–1857) and culminating with the splendid Lithuanian grammar of Friedrich Kurschat (1876), which soon became a major reference work. While studying in Leipzig with scholars such as August Leskien and Karl Brugmann, especially during the preparation of his famous *Mémoire sur le système primitif des voyelles dans les langues indo-européennes* (1878), the young Saussure became familiar with the Lithuanian language and

with the main issues of Lithuanian linguistics that were currently being debated at that time. He was also aware of the need for field research, since the Lithuanian language had not yet been fully described in a satisfactory way and was usually considered an endangered language. This is probably the reason why, following a tradition inaugurated by Schleicher and pursued by Leskien and Brugmann themselves, Saussure undertook, during the summer of 1880, a voyage to East Prussia in order to become directly acquainted with Lithuanian native speakers. The new documents given in 1996 to the public library of Geneva shed much light on this field research of Saussure in Lithuania.

A second part of Saussure's life corresponds to the productive years he spent in Paris from 1880 to 1891. While teaching in Paris, Saussure began to give to his thought on language theory its original shape. He came back to Lithuanian only in 1888. During the academic year 1888–1889 he gave a course on Lithuanian at the *Ecole Pratique des Hautes Etudes*; this course was attended in particular by Boyer, Dottin, Guiyesse, Möhl and Weill. At the same time, Saussure began to publish papers dealing with Lithuanian etymological problems. In 1889 he read a paper to the Linguistic Society of Paris (*Société de Linguistique de Paris*) on the Lithuanian tone system; it was published only in 1894. It is rightly seen as one of the most significant contributions ever made to Lithuanian linguistics.

The third part of Saussure's life begins with his decision to come back to Geneva (1891) and ends with his death in 1913. In Geneva, Saussure pursued his work on Lithuanian. With the new documents of the library of Geneva, it can now be proven that he planned to write a book on Lithuanian accentuation between 1888 and 1896. My first impression is that most of the documents relating to Lithuanian accentuation were written during the years 1893 and 1894. It seems that he definitively renounced his project in 1896. Still, considerable fragments of this book, consisting of roughly 500 pages, have been preserved in Saussure's archives, so that the structure and the main ideas of the book can be safely reconstructed. The publication of Saussure's second paper on Lithuanian accentuation in 1896, dealing with accentual mobility, was probably the final point of a research work which Saussure decided not to finish. But this is not the last word. In 1901, Saussure's pupils in Geneva asked him to give a course on Lithuanian, which he did during the academic year 1901–1902. The

public library of Geneva preserves a notebook from the hand of Charles Bally with extensive notes of this Lithuanian course; this is the Mss. 5133. Although sometimes incomplete and allusive, Bally's notes are of utmost importance, because they reveal what is probably the last stage of Saussure's thought on Lithuanian. After this date, Saussure's scientific production concerns, among other things, Germanic legends, anagrams and theoretical issues. In the courses given at the University of Geneva until his death, for example in his second and third introductory courses on general linguistics (1908–1909 and 1910–1911), he sometimes spoke about the Lithuanian language and about its position within the Indo-European family, but, apart from a comparison between the Lithuanian and the Greek tone systems in the second course (1908–1909), it seems that he did not introduce any new ideas[2].

To sum up, Saussure has dealt with the Lithuanian language at three different times: first during his visit to Lithuania (1880), secondly in Paris and Geneva between 1888 and 1896, and finally during the course given at the University of Geneva in 1901–1902. The most important documents relating to Lithuanian accentuation belong to the second period (especially during the years 1893 and 1894), when Saussure was writing a book on this matter, but extensive parts of the course of 1901–1902 were also devoted to this question; they also need a thorough examination.

In order to keep in mind the intricate history of Saussure's unpublished papers, one must primarily distinguish between the old archival holding of the public library of Geneva, which is usually designated with the abbreviation *Mss.* (= *Manuscrits français, Papiers Ferdinand de Saussure*), and the new documents given to the library in 1996, which are designated with the abbreviation *AdS.* (= *Archives de Saussure*). I use the abbreviation *RPS* for *Recueil des publications scientifiques* (1922).

For the time being, I am concerned mainly with the editing of the documents relating to the voyage to Lithuania (1880); most of them are preserved in the new collections of documents (*AdS*). These documents are above all of historical interest, because they contribute to shedding light on a period that was considered so far a mystery in

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[2] See e.g. the notes of the third course written by Constantin and published by Gambarara and Mejía Quijano (2005, 83–289, on Lithuanian p. 174).

Saussure's life. We now have direct evidence proving the reality of Saussure's voyage to Lithuania, for example a passport for Russian Lithuania with the date of August 7th 1880. We are now able to re-trace Saussure's route through Königsberg, Ragnit, Tilsit, Pröckuls, Memel and Krottingen. Saussure spent more than a week in a little East Prussian village, Paskalwen, ten kilometers from Ragnit and Tilsit, invited by a German clergyman named Otto Ziegler, and met there a young girl, named Busze Oginsky, from whom he noted a handful of Lithuanian folksongs (*dainos*) and folktales (*pasakos*). After Paskalwen, Saussure spent some time in the northern part of East Prussia, near to the town of Pröckuls, invited by another German clergyman named Franz Schröder; his main informants there were an old shepherd and a child, from whose mouths he took down Lithuanian words. Strikingly enough, never during his voyage of 1880 did the young Saussure seem to be interested in the Lithuanian stress and tone system. During his fortnight spent in Lithuania, he asked his informants several times about individual lexemes, mostly those having a well-known Indo-European etymology, or about archaic categories such as the existence of a dual number in Lithuanian. I think that, unlike his predecessors Schleicher, Leskien and Brugmann, Saussure did not publish the notes from his voyage to Lithuania because he became aware of their imprecision, especially with regard to suprasegmental notations. The fact that Saussure devoted his further research work to Lithuanian accentuation could be, at least to some extent, the reason why he declined to publish his youth notes from his Lithuanian field research.

As already mentioned, Saussure came back to the Lithuanian language while he was teaching in Paris in 1888–1889, and pursued this work until 1896, after his return to Geneva. Over this span of almost ten years, but especially during the years 1893 and 1894, Saussure wrote a considerable amount of notes, preparing an extensive publication on the Lithuanian stress and tone system. These notes are preserved in the public library of Geneva, scattered among the new documents; I have examined them during a recent stay in Geneva in May 2009. The two above-mentioned articles of 1894 and 1896 are therefore to be seen not as finished products, but rather as fragments revealing only the tip of a hidden iceberg.

In the following, I will try to illustrate to what extent these new documents can contribute to a better understanding of Saussure's

thought on Lithuanian stress and tone. I will first concentrate on the distinction of stress vs. tone; then I will deal with its Indo-European background, and finally I will present new insights on the notion of metatony in Lithuanian. Accentual mobility in nominal and verbal paradigms will be the subject of another paper.

2. Stress, vs. tone

The first point I would like to emphasize is that, for whatever reasons, nowhere in the two papers of 1894 and 1896, Saussure gives a clear definition of what he means by stress and tone. In one place he says only:

(1) **RPS, p. 504 [1894] :** *intonation, c'est-à-dire opposition entre les temps d'une syllabe*
'tone, that is: opposition between the fragments of a syllable'

In the new documents of the library of Geneva, Saussure's definitions are more precisely formulated. He writes, for example, that stress is not primarily a feature of a given phonological segment, but depends above all on structural relationships within the word:

(2) **AdS 376/19, p. 37:** *Le sujet d'une étude d'accentuation n'est jamais l'accent, mais le <u>rapport</u> qui s'établit entre l'accent <u>et le mot</u>.*
"The subject of a study on accentuation is never stress, but the <u>relationship</u> that is established between stress <u>and word</u>."

This definition is exactly reminiscent of what, some decades later, Paul Garde (1968, 10), basing on a distinction first made by Luis J. Prieto (1954), called the 'contrastive' nature of stress, using the word 'contrastive' in the special meaning of 'syntagmatic difference' (in contrast with the word 'opposition' used in the sense of 'paradigmatic difference'). With such a definition, the notion of stress is for Saussure quite different from that of tone, and it is well known that Saussure was one of the first scholars who tried to draw a clear distinction between the two notions. For him, tone refers to a syllabic feature, independently of stress, which is a contrastive feature. This idea is formulated in the paper of 1894:

(3) **RPS, p. 491 [1894] :** *Il ne s'agit décidément plus, sous ce nom, d'explorer un fait qui accompagne en lituanien l'accent tonique,*

mais un fait qui accompagne la QUANTITÉ LONGUE. *Les intonations sont une partie intégrante de la prosodie des syllabes lituaniennes; elles ne sont dans aucun rapport nécessaire avec l'accent.*
"Our main task is no longer to explore under this name [of tone] a fact that in Lithuanian is linked with stress, but a fact that is linked with LENGTH. Tones are an integral part of the prosody of the Lithuanian syllables; they have no necessary relationship with stress."

In the new documents, we find a similar definition, and Saussure adds that tone is the only syllabic feature that, unlike quantity, timbre or vocalic structure, is not necessarily implied by the very nature of a syllable. This can be illustrated by the following fragment, probably written in 1893:

(4) **AdS 378/7, p. 6:** *L'intonation est le seul ordre de faits pansyllabique qui semble <u>à priori</u> n'être pas nécessairement de tous les temps et de tous les idiomes, dans son principe même.*
"Tone is the only pansyllabic order of facts that seems <u>a priori</u> not to belong necessarily to all times nor to all languages, in its very principle."

Or more precisely:

(5) **AdS 378/7, p. 4:** *La circonstance décisive est que l'intonation lituanienne est < à la fin > un fait <u>pansyllabique</u>, < et le seul fait pansyllabique > non inclus nécessairement dans les caractères <u>naturels d'une syllabe</u>. Il occupe par là une position unique.*
Partant du lituanien, un phonologiste arriverait à poser comme éléments généraux de la forme d'une syllabe (nous dirions d'une <u>tranche vocalique</u>): sa <u>quantité</u>, son <u>timbre</u>, sa <u>composition monophtongue ou diphtongue</u> etc., et enfin son <u>intonation</u>. Or à ttes les époques et dans tous les idiomes < du monde >, il sera en effet nécessaire < par nécessité naturelle > qu'une tranche vocalique jouisse d'une certaine quantité, d'un certain timbre, et d'une certaine composition dipht. ou monopht.; mais non nécessaire qu'elle ait une certaine intonation.
"The decisive circumstance is that the Lithuanian tone is < ultimately > a <u>pansyllabic</u> fact, < and the only pansyllabic fact > that is not necessarily included amongst the <u>natural</u>

characteristics of a syllable. It therefore occupies a unique position.

Starting from Lithuanian, a phonetician would be able to consider as general elements of the form of a syllable (we would say, of a vocalic segment): its quantity, its timbre, its monophthongal or diphthongal composition, etc., and, finally, its tone. Still, at all times and in all the <world's> languages, it will indeed be necessary <by a natural necessity> for a vocalic segment to possess a certain quantity, a certain timbre and a certain monophthongal or diphthongal composition, but it won't be necessary for it to have a certain tone."

This statement about the typologically restricted nature of tones has a diachronic value as well. Saussure repeatedly claims that the Lithuanian tone system is not necessarily inherited from Indo-European, but more likely must be seen as the result of an innovation proper to the Baltic (and Slavic) languages. Saussure is here clearly at variance with a line of thought that flourished first with Adalbert Bezzenberger (1883) and Hermann Hirt (1895), and is nowadays still represented by some of the most prominents scholars, who assume the Lithuanian tones to reflect an archaic Indo-European feature. Furthermore, Saussure considers that there is a crucial difference between tones and the vocalic features which the Neogrammarian school had hitherto mainly dealt with, namely the fact that the vocalic features of any given language usually go back to similar or at least identifiable vocalic features of the proto-language, so to speak, with a high degree of diachronic transparency ($x > y$), whereas tone can arise *sui generis*, without being necessarily the output of any historical development. This view is expressed by Saussure in the following fragment (dating probably from 1893or 1894):

(6)   **AdS 378/7, p. 7:** *Le fait de l'intonation est de ceux qui ne permettent aucune restitution par* <u>*transparence*</u>*, c'est-à-dire <au nom d'une> superposition visible de deux faits successifs, dans la raison précédente.*

"Tone is one of those facts that do not allow any restitution by <u>transparency</u>, that is <in the name of> a visible super-position of two successive facts, in the preceding reason."

This formulation might probably sound rather obscure or even odd to most of the readers, even to those familiar with Saussure's style. The

point is that tone can be caused by the existence of the contrast itself, without any change of form or substance. This will become clearer once we shall have discussed a crucial notion in Saussure's linguistic theory, the notion of the so-called *invaloration*. As this notion depends on how we reconstruct the Indo-European origin of the Lithuanian tones, we shall examine both of them together.

3. The Indo-European origin of the Lithuanian tones

To begin with, I have already said that Saussure considers the existence of tones in Lithuanian not as a feature inherited from Proto-Indo-European, but as an innovation. In the new documents, this idea is abundantly attested. First, one may note that Saussure's work with the Lithuanian tone system during the years 1893 or 1894 is closely linked with his becoming aware of the necessity of distinguishing synchronic from diachronic linguistics. This explains the tone of mistrust against historical linguistics, which Saussure repeatedly uses in the papers relating to Lithuanian, as, for instance in the following note:

(7) **AdS 386, p. 86:** *La réduction aux origines ne peut passer en elle-même pour une explication.*
"Reduction to the origins can by no means in itself be taken for an explanation."

Or :

(8) **AdS 377/13, p. 19:** *La linguistique actuelle < a pour vice fondamental de > reposer sur une transaction entre l'ordre* DIACHRONIQUE *et l'ordre* SYNCHRONIQUE. *La linguistique future reconnaîtra l'impossibilité complète de ce compromis, et se constituera sur la double base de l'ordre synchronique d'une part, de l'ordre diachronique de l'autre, considérés comme des faits* opposés, *ds leur essence.*
"Present-day linguistics < has the fundamental defect that > it is based on a compromise between the DIACHRONIC order and the SYNCHRONIC order. Future linguistics will recognize the complete impossibility of this compromise and will be built on the double basis of the synchronic order on the one hand and the diachronic order on the other, considered as opposite facts in essence."

In the same notes, Saussure sometimes distinguishes two orders of facts, the one of which he calls *état* 'state', whereas the other is called *événement* 'event'. This corresponds roughly to our understanding of a *synchronic* level vs. a *diachronic* process. See, for instance, the following fragments :

(9) **AdS 377/7, p. 5:** *Tout état dont on prétend expliquer l'origine sera forcément ramené en ϕonétique à un événément (soit changement ϕonétiq.).* [I preserve Saussure's orthography] "Every state whose origin one claims to explain will be necessarily traced back, when dealing with phonetic matters, to an event (or phonetic change)."

Or more precisely :

(10) **AdS 377/5, p. 6:** (Les intonations) *ont pour <régulière> raison d'exister un ÉVÉNEMENT <(motus)>, au lieu que les quantités restées inchangées <depuis la 1ᵉ époq.> ont <seulmt> pour cause <(ou pour cause allégable)> un ETAT (status).*
"(Tones) have as a <regular> reason for their existence an EVENT <(motus)>, whereas quantities, which have remained unchanged <since the earliest period>, have <only> as a cause <(or as an allegeable cause)> a STATE (status)."

With this terminology in mind, it becomes clear that, for Saussure, the Lithuanian tones, at least to some extent, do not reflect a Proto-Indo-European state of affairs (*état*), but rather an event (*événement*):

(11) **AdS 378/7, p. 3:** *L'intonation, indépendamment de ses autres caractères, est un phénomène dont nous ne possédons absolument que le point d'arrivée.*
"Tone, independently of its other characteristics, is a phenomenon of which we do possess, strictly speaking, only the outcome."

The Lithuanian tones are seen by Saussure as an innovation. Prior to that innovation there was no tone system in Indo-European. Thus :

(12) **AdS 377/5, p. 3:** *Jusqu'à une certaine époque les syllabes n'ont pas connu de différence d'intonation.*
"Until a certain historical period syllables did not have tonal differences."

The question, of course, is what sort of event (*événement*) caused the rise of tones in Lithuanian. Here, Saussure is well aware of a crucial difficulty. Following Kurschat (1849, and especially 1876), he distinguishes two tones in Lithuanian, a *Stoßton* (or acute tone) and a *Schleifton* (or circumflex tone). For the former he coins the term *intonation rude*, for the latter the term *intonation douce* (see RPS, p. 494 [1894]). Most scholars consider the two Lithuanian tones as parts of a system each member of which could be taken as having the same historical value. That is, the Lithuanian tone system is usually seen as symmetrical, with an acute tone on the first mora of long vowels or diphthongs (e.g. Lith. *kū́nas* 'body' or *áukštas* 'high'), and a circumflex tone on the second mora of long vowels or diphthongs (e. g., Lith. *kũmas* 'godfather' or *aũkštas* 'floor'). Saussure's point of view is fundamentally different. For him, the two tones are historically unequal and should properly not be compared to each other. His starting point is an observation made about diphthongs. In diphthongs, the circumflex tone is nothing else than the perpetuation of the original state of affairs, while the acute tone is the result of a phonetic change. This idea is expressed in the following fragment, which is, in my view, one of the most fruitful insights of Saussure on the Lithuanian tone system. I date it from 1893 or 1894:

(13) **AdS 378/5, p. 18-19:** *Une partie très considérable de l'intonation lituanien[ne] repose sur des syllabes qui n'ont jamais <connu au fond> aucune intonation (positive) quelconque, et qui se bornent à perpétuer la prononciation originaire de leur groupe tel qu'il existait longtemps avant toute "intonation". <(syllabes blanches)> Ainsi p/eñ/ktas a maintenant une intonation, parce qu'il est maintenant opposé à žénklas. Mais pendant que l'intonation de žénklas correspond à un certain événmt <(postéri)>, l'int. de peñktas ne correspond à aucun événement, et n'est rien d'autre que la prononciation fidèlement transmise de tout -/en/- <indistinct> qui existait à l'époque de ˣpenktos.*

"A very considerable part of the Lithuanian tone system is based on syllables that never had <strictly speaking> any (positive) tone whatsoever, and only perpetuate the original pronunciation of their sequence such as it existed before any 'tone'. <(white syllables)> So, p/eñ/ktas now has a tone, because it is now opposed to žénklas. But, whereas the tone of žénklas corresponds to some <(later)> event, the tone

of peñktas does not correspond to any event, it is nothing other than the pronunciation, faithfully transmitted, of every <indistinct> /en/ that existed at the time of ˣpenktos."

The syllable /en/ in Lith. *peñktas* 'fifth' did not undergo any change; it reflects PIE *ĕn*, which originally did not possess any distinctive tonal contour. To use Saussure's words, no event occurred between the PIE state *penkᵘtos* and its Lithuanian outcome *peñktas*. In another fragment (AdS. 377/5, p. 10), Saussure goes so far as to speak of 'autogenous or spontaneous tones' ([intonations] *autogènes ou spontanées*). The question is how the Lithuanian tone system could have arisen if it does not reflect an original state. This is not a trivial issue for Saussure, since he claims on several occasions that linguistic change can produce limited innovations, but is by itself unable to create a complex structure that previously did not exist, unless an historical event occurred that gave rise to a functional reaction of the whole linguistic system. This idea is formulated, for instance, in the following fragment :

(14) **AdS 377/5, p. 9:** *On voit tous les jours ds la langue se former une diversité qui n'existait pas, mais non <u>un genre de diversités</u> qui n'existait pas.*
"One can see everyday a diversity arise in the language that did not exist before, but not a <u>kind of diversity</u> that did not exist."

From this point of view, the Lithuanian tone system must necessarily have been entailed by an historical event. It is clear that the acute tone is, for Saussure, precisely the place where this historical event occurred, and is therefore responsible for the rise of tonal distinctions in Lithuanian, at least in diphthongs. In the fragment given above (13), Saussure writes that the acute tone of *žénklas* 'sign' corresponds to some (later) event (*l'intonation de <u>žénklas</u> correspond à un certain événmt <(postéri)>*). In order to make clear what kind of historical event caused the rise of the acute tone in diphthongs, one may note that Saussure considers this event to be originally caused by a phonetic difference that does not exist any more as such, but has left only indirect traces :

(15) **RPS, p. 499 [1894]:** *Il s'agissait d'une différence phonique qui a cessé d'être phonique en lituanien.*

"It was a phonetic difference that ceased being phonetic in Lithuanian."

Somewhat allusively in the paper of 1894, but more positively in the new documents, Saussure argues that the acute tone is caused by the loss of a following segment, which he notes as /ö/ – that is e.g. *én = *en + ö. In the paper of 1894, he writes for example that the acute tone of the diphthong *ìr < * ŗ̄ is equivalent to *r + *ö (ŗ̄ vaut r + ö)[3] and adds :

(16) **RPS, p. 499 [1894]:** *Il diffère* [i.e. *ŗ̄, DP] *donc* DE FONDA-TION *de* ŗ, *aussi complètement qu'un* ā *diffère de* ă, *ou un* st *de* s. "It [i.e. *ŗ̄, DP] therefore differs RADICALLY from *ŗ̣, as completely as *ā* differs from *ă*, or *st* from *s*."

Taking into account the equivalence of * ŗ̄ / * ŗ and *ā / *ă, there can be no doubt that Saussure is here thinking of the *coefficients sonantiques* of his *Mémoire* (1878), which were destined to play a crucial role in the future as forerunners of the so-called 'laryngeal theory'. In the paper of 1894, however, this is not explicitly formulated and the nature of the symbol *ö remains unexplained. The new documents enable us to confirm that we are actually dealing with a new notation of what Saussure in his *Mémoire* presented as *A* and *O*. That the new phoneme *ö is identical with the *coefficients sonantiques* of the *Mémoire*, is now clearly stated by Saussure in the following fragment (dating probably from the period of the course of Lithuanian in 1901–1902) :

(17) **AdS 387/5, p. 125 recto:** *J'adopte pour le phonème < indo-européen > que je désignais autrefois par ᴬ, et qui est générale-ment exprimé aujourd'hui par* ə, *la désignation* ö. *Ce signe, dans notre intention,* n'implique rien quant à la prononciation *ne doit rien impliquer quant à la prononciation dudit phonème, et ce sont simplement des raisons pratiques < très décisives > qui nous le font préférer à* ə *ou* ᴬ. "I now adopt for the < Indo-European > phoneme that I designated in the past as ᴬ, and that is now generally ex-

> pressed by ə, the designation ö. This sign, in our view, ~~does not imply anything concerning the pronunciation~~ must not be taken to imply anything concerning the pronunciation of the aforesaid phoneme, and this is simply <very decisive> practical reasons that lead us to prefer it to ə or $\underline{A}$."

In the notes taken by Bally from the course of Lithuanian of 1901–1902 in Geneva, we find similar observations, sometimes formulated in a more realistic way. For instance, Saussure reconstructs (Mss. 5133, p. 26 [1901–1902]) a form *wemö- to explain Lith. *vémti* 'to vomit', OInd. *vámiti*, Lat. *vomitum* (where *i* can be traced back to *a* in internal position); this does not differ very much from our modern reconstruction PIE *u̯emh₁-. He likewise explains the acute tone of Lith. *árklas* "plough", compared with Gr. ἄροτρον, by a form *arö-. Our reconstruction would there be *h₂erh₃-.

It must be noted that Saussure considers the loss of the phoneme *ö to have first yielded a compensatory lenghthening :

(18) **AdS 387/5, p. 127:** *C'est uniquement dans le type* gerö-ti *que la chute de* ö CHANGEAIT L'ÉTAT VOCALIQUE *de la syllabe précédente, et* <DEVENAIT LA CAUSE D'UNE TRANCHE LONGUE non-existante auparavant>.

"It is only in the type *gerö-ti* that the loss of *ö* CHANGED THE VOCALIC STATE of the preceding syllable, and <BECAME THE CAUSE OF A LONG SEGMENT that did not exist previously>.

That is, Saussure posits an intermediary stage with long vowel, for example :

I. *gerö-ti (in our modern reconstruction PIE *gʷerh₃-)
> II. *gēr-ti (compensatory lengthening)
> III. *gér-ti (acute tone),
Lith. *gérti* "to drink".

Interestingly enough, Saussure presents this new phoneme *ö as being unique (he uses only one symbol *ö), whereas in the *Mémoire* he was speaking of two *coefficients sonantiques* (*A* and *O*, corresponding to our modern notations h_2 and h_3). It is still unclear whether Saussure changed his mind between 1878 and 1893–1894, and/or used a unique symbol *ö because the distinction of two phonemes was in this case useless, since their effect on the rise of tonal distinctions in Lithuanian was the

same. Another interesting point is that Saussure does not speak any more of *coefficients sonantiques*, but only of a *vowel*. In AdS 386, 19/2, for example, he explains the acute tone in Lith. *sáulė* "sun" (compared with Gr. ἥλιος) by a syncopated vowel *ö (*voyelle syncopée* ö).

In this context, Saussure's views on the Lithuanian tone system as being radically asymmetrical become clearer. Whereas the acute tone is due to the loss of a following vowel *ö, the circumflex tone is merely due to its opposition with the acute tone without being the result of any historical change. This is the basis of the crucial notion of *invaloration* Saussure repeatedly refers to in the documents relating to the Lithuanian tone system. For example, dealing once again with the opposition of Lith. *peñktas* 'fifth' and *žénklas* 'sign', he gives the following definition of the notion of *invaloration*:

(19) **AdS 378/11, p. 10:** *investissement d'une valeur déterminée à une chose qui reste exactement la même, par le fait qu'elle n'a plus <en face d'elle> le même échiquier.*
"acquisition of a given value by a thing that remains exactly the same due to the fact that it does not have any more <in front of itself> the same chessboard."

As is well known, the metaphor of the chessboard has played a crucial role in Saussure's linguistic thought, especially refering to the idea that language must be seen as a system each piece of which has a value only in so far as it is opposed to the other pieces[4]. In the new fund, this view is repeatedly expressed, e.g. :

(20) **AdS 377/13, p. 19:** *Rien n'est défini jamais par une qualité intrinsèque; tout est défini par la combinaison <fortuite> des différences.*
"Nothing is ever defined by an intrinsic quality; everything is defined by the <fortuitous> combination of differences."

In another fragment (AdS 386/18), Saussure compares the rise of tones in Lithuanian and a similar development attested in some German (Rhenan) dialects: in those dialects, the opposition of the nominative *lōn* and the dative *lōne* ('salary', cf. German *Lohn*) gave rise, after the

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[4] See Purdy (1986, 244–259), Mejía (1998, 75–102), Depecker (2009, 57).

loss of final -*e*, to a "characteristic inflection that subsists as a remnant of the deleted syllable" (*inflexion caractéristique subsistant comme un souvenir de la syllabe supprimée*), hence a dative form *lõn*. The crucial point here is that, without any modification whatsoever, the nominative form acquired a tonal feature only through its opposition with the dative form, where the tone is the result of a phonetic change. The comparison with the Lithuanian tone system can be formalised in the following table (using more or less precisely Saussure's notations):

German dialects			Lithuanian	
(a) Nom. *lōn* Nom. *lõn*	(b) Dat. *lōne* Dat. *lõn*	Stage I: no tonal feature Stage II: phonetic change in form (b) and rise of syllabic tone by invaloration also in form (a)	(a) **penkᵘtos* "fifth" *peñktas*	(b) **ĝenö-tlo-* "sign" *žénklas*

To this comparison Saussure adds an insightful commentary :

(21) **AdS 386, 18:** *Quelle est la philosophie de ce cas ? En apparence tt simplement qu'une transformation unilatérale est capable de produire une différence bilatérale dans l'état subséquent.*
"Which is the philosophy of this case ? Apparently simply the fact that a unilateral transformation is able to produce a bilateral difference in the following state."

To sum up, Saussure draws a clear distinction in diphthongs between the acute tone that arose phonetically from the loss of a following vowel *ö* and the circumflex tone that arose only through its opposition with the acute tone.

It remains to be stated whether Saussure explained the rise of tonal distinctions in VOWELS in the same way as he did in DIPHTHONGS. This is a crucial point, because this would mean that the acute tone is an innovation in vowels as well as in diphthongs, and is also due there to the loss of a following vowel **ö*. To put it into our modern terminology, this would explain the acute tone by the loss of a follow-

ing laryngeal IN ANY CASE (vowels or diphthongs). As is well known, this is the theory repeatedly advocated by F. Kortlandt for more than thirty years (e.g. 1975, 1977, 1985, see more recently 2009). The other option is that vowels behave differently from diphthongs; this is the classical theory, supported, for example, by Ch. S. Stang (1966), who considers that the acute tone of vowels reflects the PIE state of affairs (e.g. Lith. *ó* < PIE *$\bar{a}$*), whereas the circumflex tone is the result of secondary developments. Saussure's position on this question is clearly given in the paper of 1894. He traces back the acute tone to vowels of PIE date, the circumflex tone to recent vowels (e.g. long vowels secondarily created or late integrated into Lithuanian, as for example in loanwords). Obviously, Saussure here foreshadows the classical theory.

Last but not least, another interesting point in the new documents is that Saussure turned his attention to the Latvian tone system as well and tried to explain its relationship to Lithuanian. His information on Latvian was not so complete as on Lithuanian, and he seems to have been strongly dependent on the few available reference works, especially the Latvian grammar of Bielenstein (1863–1864), which he had bought in 1889. Bielenstein spoke of two tones (called by him *Silbenakzente*) in Latvian, a falling tone (*gestoßen*) and a sustained tone (*gedehnt*). But other scholars, first of all Endzelīns, have proved beyond any doubt that the most conservative Latvian dialects have a system with three tones: a falling tone (Latv. *krītošā intonācija*, e.g. *pràts* 'mind'), a sustained tone (Latv. *stieptā intonācija*, e.g. *mãte* 'mother') and a broken tone (Latv. *lauztā intonācija*, e.g. *plâns* 'thin'). Moreover, Endzelīns showed in 1899 (DI$_I$ 117–132 [1899]) that the Latvian falling tone corresponds to the Lithuanian circumflex tone (e.g. Latvian *pràts* = Lith. *prõtas* 'mind'), the Latvian sustained tone to the Lithuanian acute tone in originally stressed syllables (e.g. Latv. *mãte* 'mother' = Lith. *mótė* 'woman' AP 1 < *$m\acute{a}t\bar{e}$*) and the Latvian broken tone to the Lithuanian acute tone in originally unstressed syllables (e.g. Latv. *plâns* = Lith. *plónas* 'thin' AP 3 < *$pl\bar{a}n\acute{a}s$*)[5]. In some of the new documents, Saussure analyses the Latvian material and tries to establish rules to explain its relationship to Lithuanian. It seems that he was not far from the solution Endzelīns discovered a few years later. He writes for example :

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[5] On 'Endzelīns' Law' in Latvian, see Young (1994, 101–108).

(22) **AdS 386 153/3:** *Les intonations lettes / ne sont en relation ni directemt ni indiremt avec les intonations lituaniennes, mais en revanche sont en relation avec les classes d'accentuation du lit. L'opposition fondamentale entre le type* MOBILE *et* IMMOBILE *joue un rôle.*

"The Latvian tones / are not related neither directly nor indirectly to the Lithuanian tones, but they are related to the Lithuanian stress classes. The fundamental opposition between the MOBILE type and the IMMOBILE type plays a role."

In another fragment (AdS 378/9, p. 5), he writes that the Latvian tones are explained by the presence or the absence of the ictus. I am not yet able to date these fragments precisely, but they seem to have been written, like most of the papers pertaining to the Baltic tone system, during the years 1893 or 1894. If so, Saussure could have discovered the rules explaining the regularity between the Lithuanian and the Latvian tones *before* Endzelīns.

4. Metatony in Lithuanian

I now turn to the notion of metatony. As is well known, in his paper of 1894, Saussure coins the term *métatonie* to account for tone variations within cognate derivatives. He speaks of *métatonie douce* when an acute tone is changed into a circumflex tone (e.g. Lith. *bė́gti* 'to run' → *bė̃gis* 'running') and of *métatonie rude* when a circumflex tone is changed into an acute one (e.g. Lith. *sveĩkas* 'healthy' → *svéikinti* 'to greet'). Saussure uses only the term *métatonie*, although he is well aware of the fact that it can refer to different notions. From an historical point of view, a metatony occurs when a given tone is changed into the other one; see e.g. the following definition given by Saussure[6]:

(23) **RPS, p. 494 [1894]:** (formes) *qui, offrant depuis l'origine une voyelle longue, ont, après coup,* RENVERSÉ L'INTONATION PRIMITIVE *de cette voyelle*

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[6] See also Derksen (1996: 1): *the change of one tone into another*; however, Derksen considers this definition to be partly inaccurate and proposes a strictly etymological definition: "*We speak of metatony if we find a reflex of the Balto-Slavic circumflex intonation where we would have expected a reflex of the acute intonation or vice versa.*".

(forms) "which, having from the beginning a long vowel, after the event REVERSED THE PRIMITIVE TONE of that vowel"

To this diachronic definition Saussure adds a synchronic definition :

(24) **RPS, p. 494 [1894] :** (la métatonie) *se traduit à nos yeux par une* alternance *de l'intonation (caractéristique de* certaines classes de formes*, comme toutes les alternances)*
(metatony) "appears to us as an *alternation* of tone (characteristic of *certain classes of words*, like all alternations)"

The contribution of the new documents to the theory of metatony is fundamental. They show that Saussure proposed to distinguish different kinds of processes, for which he coined different terms. I quote the relevant fragment here extensively, because it is crucial to our perspective:

(25) **AdS 378/9, p. 1verso:** *Nous appelons paratonie le changement de la voix d'une syllabe <s'opérant mécaniquement et en vertu d'une loi phonétique. > Le phénomène est connu: c'est celui qui se produit à la suite de la syncope d'une voyelle ictuée:* <u>kokìs</u> *donne* <u>kõks</u>.
Nous appelons apotonie <les déviations régulières> d'1 syllabe par suite de <circonstances accidentelles>. <u>tūbà</u>*, acc.* <u>tū̃bą</u> *feutre. Cf.* <u>tū́bis</u>.
Le nom de métatonie est celui que ns <réservons au> changement de voix qui se produit sans <l'intervention d'aucune> cause extérieure <directe ou indirecte>, mais par une libre disposition de la langue, faisant de ce changement un procédé morphologique.
"We call paratony the change of the voice of a syllable <taking place mecanically and by virtue of a phonetic law.> The phenomenon is well known: it is the one that occurs following the syncope of a stressed vowel: <u>*kokìs*</u> yields <u>*kõks*</u>. We call apotony <the regular deviations> of 1 syllable due to <accidental circumstances>. <u>*tūbà*</u>, Acc. <u>*tū̃bą*</u> felt. Cf. <u>*tū́bis*</u>. We <reserve> the name of metatony for the change of voice that occurs without <intervention of any> external cause <directly or indirectly>, but by a free disposition of the language, turning this change to a morphological device.

The term *métatonie* is here used not as a cover symbol refering to a whole set of different processes, which is obviously the case in the paper of 1894 (and in the further research), but as part of a system alongside two other notions of *paratonie* and *apotonie*. Saussure's classification is based on the nature of the historical event that produced the new tone: this event is seen either as phonetic (in the case of paratony) or as morphological (in the case of metatony), or its nature remains undetermined (in the case of apotony). While coining these new terms, Saussure probably had in mind the distinction posed since Jacob Grimm (1822) between *Umlaut* and *Ablaut*, reserving the former for a vocalic alternation due to the phonetic influence of a following vowel, the later for a vocalic alternation without any obvious phonetic input. But Saussure assigned to this terminology a new function, using the term *apotonie* in the neutral sense of unmotived tonal variation (*apo-* simply denoting the change as an historical event, stated, but not explained), whilst reserving the term *métatonie* for any tonal variation of a morphological nature (*meta-* denoting a change by derivation), the term *paratonie* for any tonal variation of a phonetic nature (*para-* denoting a change by contiguity). The new terminology is strongly reminiscent of the terms *aposème* and *parasème* Saussure proposed a few years later[7]. Taking as point of reference any item of a given language (called by him *sème*), the term *aposème* refers to all previous forms at a diachronic level (e.g. between Lat. *calidus* and Fr. *chaud* 'hot' there is a continuity that is characteristic for aposemes), while the term *parasème* refers to all other items of the same language (e.g. Fr. *froid* 'cold' is a paraseme of *chaud* 'hot'). *Aposème* implies an historical depth, *parasème* is stricly synchronic. Similarly, the term *apotonie* refers to a tone change that implies an historical event and cannot be explained at a synchronic level, while the term *paratonie* refers to any tone change by contiguity without any historical consideration. Only the term *métatonie* seems to be a creation of Saussure, refering to the morphological use of tone variation.

A look at the examples given by Saussure shows how he saw the distinction amongst the three notions. For the notion of paratony he

[7] On the notions of *aposème* and *parasème*, see the contribution of Mejía (1999, 237–252). Saussure defines the *aposème* as "corpse of a seme" (Mss. 3314.6: *Aposème = cadavre de sème*). For him, the only and simple quality of paraseme is to belong to the same psychological system of signs (Mss. 3313.2: *la seule et simple qualité du parasème est de faire partie du même système psychologique de signes*), see Mejía (1999, 241). See also Depecker (2009, 68).

refers to the word *kõks* 'quality' (= *kõkis*, nowadays displaced in colloquial Lithuanian by *kokýbė*). He obviously sees a connection between the loss of the final vowel *i* and the rise of the circumflex tone. Although this view is certainly mistaken (cf. the more usual form in the East Prussian dialects *kõkis*), it is interesting in as much as it invites a comparison of paratony with the classical notion of *Umlaut* (change of a vowel due to a following vowel). For the notion of apotony he refers to the word *tūbà* 'felt', where the (in fact mistaken) circumflex tone of the accusative *tū̃bą*, compared to the regular acute tone of the by form *tū́bis*, remains unexplained; it is synchronically obscure. For the notion of metatony he does not give any example, but it is obvious that he is thinking of tonal variations characteristic of certain derivative formations, as for example the *métatonie rude* in the iterative-causative verbs in *-inti* (e.g. *svéikinti* 'to greet'). This corresponds to a principle given by Saussure in the paper of 1894:

> (26) **RPS, p. 495 [1894]:** *La métatonie, presque partout où on peut l'observer, est dirigée dans le même sens pour chaque formation donnée, et ne consiste pas dans le renversement indifférent de l'une ou de l'autre intonation.*
> "Metatony, almost everywhere where it can be observed, is conducted towards the same direction for every given formation and does not consist of the indifferent reversion of one or the other tone."

It is noteworthy that the notion of paratony, which is of a phonetic nature, has a diachronic value, whereas the notion of metatony, which is of a morphological nature, is only synchronic, this being in accordance with the view, often advocated by Saussure, that phonetics is strictly diachronic, whereas morphology is strictly synchronic, cf.:

> (27) **Letter to Gaston Paris of December 30th 1891**[8]**:** *Il y aurait opposition primordiale, et incompatibilité, entre la vue* phonétique *de la langue, qui suppose "succession" et "abstraction totale du sens" — et la vue* morphologique *(grammaticale) qui suppose "unité d'époque" et "prise en considération du sens, valeur, emploi".*
> "There would be a primary opposition, and incompatibility, between the *phonetic* view of language, which supposes "suc-

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[8] See Decimo (1994-1995: 78-79), Mejía (1998, 84).

cessivity" and "complete abstraction from meaning" — and the *morphological* (grammatical) view, which supposes "unity of epoch" and "taking into account meaning, value, use"."

Although some details remain obscure and must be left open for further investigation, there can be no doubt that the threefold distinction established by Saussure sheds much light on a debate that is still very active among scholars dealing with the Baltic tone system.

5. Conclusion

My aim in the present paper has been to show that Saussure's views on the Lithuanian stress and tone system were more decisive than they appear only from the two published papers of 1894 and 1896. The first point I would like to emphasize is that the manuscripts of 1893 or 1894 and the notes taken by Bally in the course of 1901–1902 enable us to understand Saussure's views on stress, tone, tonogenesis and tone variation in a more precise way than is usually done. They are of great interest not only for historians of linguistics, but they also provide to awkward issues of Lithuanian accentology solutions that may be still useful nowadays. To my mind, Saussure's most original contribution is his reconstruction of the Lithuanian tone system as asymmetrical, with the acute tone being ascribed a special position. For the notion of metatony as well, the new documents deserve a thorough examination. Finally, the significance of the Lithuanian material in the public library of Geneva for the understanding of Saussure's theoretical thought must not be underestimated; one might even say that Lithuanian was for Saussure to a large extent a laboratory where he developped his ideas. It is time to revive this treasure and to give it the place it deserves.

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