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Liquescent Neumes with Added letters (Handout for Table Discussion)

Stephan Zippe

Translated by Fr. Anthony Ruff, OSB

1. Introduction

Without doubt, one of the essential elements lending characteristic style to chant is the Gregorian liquescent. It is found ubiquitously in the repertoire, from the simple psalmody right up to the melodically richly ornamented verses of the graduals. In the manuscript tradition, particular signs and additions were employed from the beginning in order to record this tonal phenomenon. According to our current state of knowledge, the origin of the liquescent reaches back to the 8th century, to the so-called Carolingian Renaissance when Charlemagne implemented a reform of pronunciation under the advice of his advisor Alcuin. In his paper at the last congress in Hilsdeheim, Josef Kohlhäufel explained that the phonetic presuppositions for the liquescent can all be traced back to omission, assimilation, amalgamation, or suppression of sounds which vulgar Latin had gradually developed since the 2nd century, in contrast to classical Latin. But in the neumes, there is not always a liquescent actually written where it would have been phonetically possible. This fact is already a point of reference indicating that in Gregorian compositions the liquescent had become a form-giving principle. Melodic factors also play a decisive role in their application.

Because of the great importance which the liquescent takes on as “means of style” for the performance and interpretation of chant, an intensive engagement with this phenomenon is called for. Much has already been investigated. But there still are some things to discover in this wide field, e.g. in the realm of letters which are oftentimes written by liquescents. Today I wish to offer a brief overview of this topic and present some concrete examples. In order to arrive at an overview of the entire area, I will limit myself in this talk to pieces found in the Graduale Triplex. True, the topic is not thereby treated comprehensively; but at least in this manner we can possibly gain an impression of the possibilities which are offered us and the difficulties which confront us.

2. Problems of Notation and Performance

In the attempt to reconstruct the melodies of Gregorian chant according to the witness of the oldest manuscripts, difficulties repeatedly arise precisely in the realm of the liquescent, especially when it is a case of fixing the pitch of the liquescent note on the staff lines. Apart from the question of whether a diminished liquescent pitch is present – i.e., by aural reduction of the vowel on the last pitch of a neume – or whether the liquescent pitch is connected as an

augmented tone added to the vowel, one is always caught in the dilemma in the square notation of having to notate specific pitches. In his article “The Liquescent,” Fulvio Rampi arrives at the conclusion that the liquescent is always an augmented phenomenon in its performance and interpretation. And in fact it well makes little difference in the aural realization whether one sings an added liquescent pitch, or whether one sings a liquescent pitch which has its origin, in comparison to nonliquescent passages, in the diminishment of a vowel. In practice, who even thinks in each case about whether the liquescent pitch printed so small in the square notation originally came about as an augmented or a diminished liquescent? And how many times can this not even be determined?! In their Einführung in die Interpretation, Luigi Agustoni and Johannes Göschl presuppose little difference. On this question they remark that apparently one can give no definitive and universal answer, and the final word is no doubt reserved to concrete analysis in context.

Above and beyond this, a look at the notation in Benevento shows that the matter of a liquescent pitch is more complex than “yes” or “no.” The manuscript Bv 34, for example, shows in most cases three different levels of liquescent alongside the nonliquescent form of the neume. Of these three levels, in each case only the third level specifies a particular liquescent pitch which is fixed at a level of highness or lowness. For a liquescent of the 1st or 2nd level, by contrast, one is within a realm which largely escapes the half-step framework of staff notation. Purely graphically, the three forms of the liquescent always build upon each other. That is to say, the sign for a second-level liquescent is an enlargement of the sign for a first-level liquescent, and the mark for a third-level liquescent comes about by adding on the liquescent pitch. One can thus presume that, at least in Benevento, there must have been at least two intermediate levels between a rendition with no liquescent and the execution with a liquescent pitch. One can assume that the gradated increased complexity in the graphic signs was tied to some sort or other of gradated increase in the sung realization. It is very difficult to say how this gradation in liquescent singing appeared concretely. Perhaps one began already with a second-level liquescent to slide into a pitch without thereby aiming for a precisely defined pitch level; or perhaps the “upgraded” liquescent was rendered merely with increased volume? The present question is whether one can find in the adiastematic [lineless] manuscripts further indications for the performance of the Gregorian liquescent. Is it possible that the *litterae significativae* [“significant letters,” added letters] which are frequently written by the liquescents could offer further help?

3. Overview

In fact, letters are often by placed next to liquescent neumes and, because of their position, these letters surely relate to the liquescents. In the pieces in the Graduale Triplex alone one

finds at least 1,213 cases of *litterae significativae* by liquescents; of these, 159 come from the cantatorium, 174 from Laon, and 880 from Einsiedeln. The following table conveys a visual overview:

	In all	C	L	E
“i”	480	60 (2x i m)	1	419 (i st / 12x i m / 4x i p)
“s”	408	70 (m s / s m)	2 (s c)	335 (s i / s p / 11x s m / s t)
“a”	104	19 (a p)	41 (4x +TIR)	44 (a m / a c)
“c”	68	1	65 (c m / 2x f c / 3x +TIR)	2 (c m)
“l”	58	2	-	56 (l b / l p)
<i>TIR</i>	56	-	56	-
“p”	13	2	-	11
“m”	9	-	5 (m f)	4
“t”	6	3 (t s / 2x t m)	2	2 (t i)
“e”	4	-	-	4 (e s)
“vol”	3	1	-	2
“len”	2	1	-	1
“n”	2	-	2 (nt)	-
TOTAL	1213	159	174	880

As said, this table intends to show only the general features and is related exclusively to the pieces found in the Graduale Triplex. The offertory verses not recorded there, for example, are not consulted. There are also some doubtful places in the manuscripts in which the corresponding letter is only be recognized with difficulty, or its relationship to the liquescent is ambiguous. By way of summary one can state that the majority of the liquescent letters are

those which give indications for “highness”: only highness of pitch can be meant. To these belong *i(usum)*, *s(ursum)*, *a(ltius)*, *l(evate)* and *e(qualiter)*, oftentimes further specified by an added *m(ediocriter)*, *p(arvum)*, *b(ene)*, *st(atim)*, *c(eleriter)*, or a Tironian sign. A few times *p(arvum)* and *m(ediocriter)* appear alone. Then it is unclear whether the letter should be understood as an indication of rhythm or of pitch. The letter combinations *vol(ubiliter)* [= “lithesome, flexible”] and *len(iter)* [= “pleasing”] appear rarely by a liquescent and surely refer to a particular manner of vocal technique. They would most likely relate neither to melodic pattern concretely nor to tempo directly, but rather, would surely be interpreted as a directive for the vocal procedure of the singer. It is striking that in the Laon manuscript *c(eleriter)* is frequently by a liquescent. For one thing, this is astonishing because this letter has rhythmic meaning. For another thing, this letter hardly ever appears in the cantatorium or in Einsiedeln by a liquescent. It is also interesting in this connection that *t(enete)* as a rhythmic counterpart to *c(eleriter)* is hardly ever employed, independent of which manuscript.

4. The “e” by the Liquescent in Einsiedeln 121

Now I wish to present some concrete examples. I begin with the four cases from the Graduale Triplex of an *e(qualiter)* by the liquescent in E.

- GT 280:2: Al. “Verba mea”

In the realm of the liquescent, the melodic version of the Vatican edition is witnessed in A, Y, and R. But Bv and Mp have a different melody which cannot be harmonized with the neumes in E for long stretches. In A, a second version is additionally found, while the piece is not found at all in K and V. Despite this non-uniform and limited source basis, the melody given here in the Graduale Triplex can be seen as secured.

At first glance the “e” in E does not even stand by the liquescent, and when one looks in the manuscript itself, this impression is strengthened. The “e” stands far removed from the epiphonus, next to the virga written over the following syllable. And yet it pertains to the preceding liquescent, because the main note of the epiphonus is SO and connects to the following syllable on LA. Here, the “e” calls for a unison relationship between the epiphonus beginning with SO and the LA following it. It is thereby clear that, according to the witness of E, the epiphonus must have the liquescent tone LA. This is confirmed by the diastematic [lined] manuscripts already mentioned.

- GT 610:5: Of. “Stetit angelus ... ascendit”

The “e” in this place must be read somewhat differently. Based on its position, it can only relate to the liquescent, just as the “s” standing directly under. Thus, we have here a

case in which two letters are written by a liquescent. If one understands the “s” as proof for the existence of a higher liquescent pitch, then the “e” can help, as in the previous case, to determine the liquescent pitch. According to the witness of Bv, A, K, and Mp the epiphonus begins on SO; but the melody then descends to FA on the following syllable. That means that there can be no question of a unison relationship to the following pitch. Thus, the “e” here must have another point of reference. Because of the position, a relationship to the pitch level LA preceding the epiphonus is conceivable. That they are given profile by means of tone duplication, which in E and L is designated as non-flowing, makes plausible a relationship to something earlier. This understanding is confirmed also by the diastematic manuscripts listed above, which all give the liquescent pitch as LA. No liquescent pitch is recognizable in the facsimile of V, and R writes a pes SO-LA with the added liquescent pitch SO instead of an epiphonus.

- GT 29:2: Co. “Exsultavit ut gigas ... summum ei¹us.”

Here also the liquescent pitch FA is witnessed in all diastematic manuscripts,¹ whereby R notates a nonliquescent SO-MI-FA porrectus. This could permit one to presume a diminished liquescent in this case. Bv also employs the sign of a diminished liquescent porrectus here. With high likelihood it is not a case of an added pitch in the actual sense here, but rather a liquescent pitch which came about by reduction of the vowel.

The “e” in E stands to the right of the liquescent and thereby applies to the relationship to the following tone (LA). But because “e” is oftentimes employed in this manuscript even for halftone relationships, it cannot be taken here as an argument for the existence of a liquescent pitch. The reason for the annotation could well be that the scribe seemingly at first forgot the final syllable of “eius” and then went back to add it. The very close connection compelled the scribe to place the virga underneath the preceding melisma. In this case the “e” takes on a certain corrective function, even as the St. Gall neumatic writing has no diastematic notation.

- GT 178:1: “Quid ultra debui”

Here we have a portion of the Good Friday Reproaches. It is immediately striking that the melodic version of the Vatican edition does not match with the indication “e” to the right above the epiphonus in E. The liquescent pitch is MI, and next a melodic descent to

¹ Cf. *Beiträge zur Gregorianik* 21

RE follows. That this cannot be become even clearer when one takes counsel from G 376 (190:13). There is a virga there instead of the tractulus in E for the final syllable of “ultra.” And yet, the melody of the Vatican edition is documented in most of the diastematic manuscripts. Only in Sa (101:9) and Mol 13 ((93^v:7) is there a version which can be harmonized with the “e” in E: namely, if the epiphonus lies a tone lower, that is, if it connects at the unison to the preceding pitch on “quid.” However, this raises a question: is this reading compatible with the “a” the epiphonus to the left above?! Because the “a” is unimaginable for the preceding unison connection, it must likewise be understood as applying to the liquescent. But given the position to the left above the epiphonus, is this even possible?

In order to be able to answer this question, it is necessary to investigate the various positions which the *litterae significativae* by the epiphonus are able to take on.

1. Possible Positions of the Letters by the Epiphonus

The question of whether a letter by an epiphonus, because of its position, relates to the main note or to a putative liquescent pitch can only be answered accurately by a comparative study of all cases. But here I must limit myself to presenting a few selected examples.

- GT 269:4: Gr. “Quis sicut Dominus”

The “s” in E stands directly underneath the epiphonus and thus can only relate for sure to the lower pitch, i.e. the main note. The melodic progression also corresponds to this: after a double FA on the preceding syllable, the epiphonus begins a pitch higher on SO. C also writes “s”: but not underneath, but rather to the right next to the epiphonus. With this position below to the right, an understanding of the “s” as related to the liquescent pitch no longer appears excluded, but nor is it compelling according to the optic impression.

- GT 336:8: Gr. “Laetatus sum ... V. Fiat pax”

Here, in contrast, an assignation of the letters is possible without difficulties. The “e” under the epiphonus to the left stands for the unison connection with the preceding pitch (RE), and the “l” above to the right applies to the liquescent pitch (FA). In C, an “a” is written above the epiphonus pushed a bit to the right. This – corresponding to the “l” in E – can likewise only relate to the liquescent. However, here the highness of the liquescent pitches for “l” and “a” cannot be so precisely determined as for the “e” in the preceding examples. The question of whether an indication of the highness of the liquescent pitch is

given with the choice of the letters “*l*” or “*a*” or also “*s*” requires further, more comprehensive investigation. But for now, let us go on to the next examples of varying positions of the letters by the epiphonus.

- GT 258:2: Gr. “Benedictus Dominus ... mirabilia magna”

This example shows that a letter above the epiphonus to the right does not relate to its main note. The “*s*” above to the right demands an ascent. But because a melodic descent from DO to LA occurs from “mirabilia” to the epiphonus, there remains only an understanding of “*s*” as relating to the liquescent.

- GT 173:2: Tr. “Domine exaudi ... in quacumque”

Apparently the “*l*” standing next to the epiphonus to the left in E clearly belongs to its main note. If one makes a comparison with C in this place, one determines that the pitch doubling in E, which is witnessed in the Vatican edition and in many other manuscripts, must fall away. This results in a melodic ascent from RE to FA before the epiphonus in E, which is well explained by the “*l*.” One would thereby understand the “*l*” as relating to the main note of the epiphonus. But uncertainty comes about from the fact that, despite the pitch doubling in C, i.e., at the unison connection of the epiphonus with the preceding pitch, an “*s*” stands in this very place. Because of the preceding pitch at the unison, this “*s*” cannot be related to the main note of the epiphonus. Furthermore, an assignation of the “*s*” to the virga is, because of its position, unlikely. The “*s*” stands above the epiphonus, pushed a bit to the left. If one excludes a relationship to the virga, then it only remains to understand it in relation to the liquescent, even though the “*s*” stands above the epiphonus a bit to the left. Even more extreme in the respect is the following example.

- GT 430:4: Al. “Gaudete iusti”

Here the “*s*” in E clearly stands above the epiphonus, a bit to the left. A relationship to the main note would be thinkable, just from the leftward position. But an ascent of the melody from the tristropha to the main note of the epiphonus is found in no diastematic manuscript. To be sure, the diastematic manuscripts differ from one another with respect to the number of unison pitches and the indication of a liquescent. And yet, apart from the liquescent pitch, they all witness three or four unison pitches. Mo7 (123:3) is the only manuscript with a fourfold FA and a liquescent pitch SO, which corresponds to the data of C, E, and L. All other manuscripts notate, as does the Vatican edition, only a threefold FA: Bv, A, Y, Mp, Mc546, and Mo13 in each case with the liquescent pitch SO; K and R

with the liquescent pitch MI; Th, Msb, and V without a liquescent pitch. From the fact that the epiphonus connects to the preceding tristropha at the unison, it follows that the “s” in E, despite its position to the left of the epiphonus (and above), must relate to the liquescent.

Summary and Thesis:

Precisely the last example has shown that letters above an epiphonus to the left can surely have a relationship to the liquescent. This means that for the “a” in the example “Quid ultra debui,” an interpretation applying it to the liquescent, along with the “e” standing next to it to the right, is not excluded. On the question of whether a letter by the epiphonus relates to the liquescent, we need further investigations before we can derive the thesis that it is primarily the vertical position of a letter (i.e., whether the letter is above, beside, or below the epiphonus) which is determinative. I was merely able to raise the topic with these few examples. Now I wish to move on and speak of a peculiarity of the liquescent letters. A brief look back at Al. “Gaudete iusti” shows “s c” by the liquescent in L. In E there is only an “s” written in this place.

6. The “c” by the Liquescent in L 239

From the overview I initially presented, one learned that the letter “c” by liquescent neumes appears almost exclusively in L. A comparison of the places in which C or E also notate a liquescent letter should shed further light on the meaning of “c” in L for the performance of the liquescent. For this, 35 of the c. 65 cases in GT of a “c” by the liquescent in L come into question. In four further corresponding cases, nonliquescent forms are found either in C or in E.

The Al. “Gaudete iusti” already mentioned is the only case of an epiphonus in this context. L prefers to place the “c” next to the cephalicus (10) and the liquescent forms of the lineola (6), virga, and porrectus.

a) „c“ by the Liquescent Lineola

In GT there are 6 cases of a “c” by the liquescent lineola in L. Twice the “c” is directly above the liquescent sign, twice it is next to it to the right, and twice it is above it to the right. It is never written under it. In three cases the corresponding places in E and C (insofar as it is extant) write an “i,” twice an “a,” and once an “s” (or “a” in C). This means that in the corresponding places in the St. Gall notation one finds a tristropha with “i” three times and a tristropha with “s” or “a” three times by the liquescent. This fact

allows one to presume either that “c” in L cannot be adduced as an argument for or against a liquescent pitch, or that the letters “i,” “a,” and “s” in the St. Gall notation cannot be compellingly interpreted for or against the performance of a liquescent pitch.

A look at Bv shows that a liquescent pitch is not given in any of the six cases there. Twice one finds a liquescent of the second level, once an augmented liquescent form of the “tristropa” without an added pitch (i.e., a liquescent of the 1st level), and in three cases Bv notates it as nonliquescent. A, Y, and K also notate these places, with three exceptions, without liquescent. A has written an augmented liquescent only in the Co. “Revelabitur” and in the Gr. “Benedicite Dominum,” but an added pitch is not clearly recognizable. Only in Y must one take an added pitch as certain at this spot in the Co. “Revelabitur.” Thus, the source materials in the diastematic manuscripts allow one to presume that a “c” by the liquescent lineola speaks against the singing of an added pitch. The shape of the writing itself, which conveys a rather cohesive impression, strengthens this impression. But what is the case with the cephalicus?

b) „c“ by the Cephalicus

There are 10 places in the Graduale Triplex with “c” by the cephalicus in L in which E writes either a nonliquescent form or a letter by the cephalicus. *i*” is found in E five times, and three times a nonliquescent form is found there. Thus, there is no direct correspondence. The witness of the diastematic manuscripts with respect to the liquescent places likewise differs sharply. In the corresponding places one finds a liquescent pitch in one manuscript, nonliquescent notation by contrast in another manuscript, and a note to be fully sung in place of the liquescent pitch in yet another manuscript. Let the In. “Deus in adiutorium” (GT 315:4) serve as an example: Bv notates RE with liquescent pitch SO for the cephalicus over “adiuvandum me.” The cephalicus LA-SO (transposed) in K corresponds to this. And while a clivis LA-SO is found in R instead of the cephalicus, A, Y, MY, and R have no liquescent here. A further example for the lack of unity in the tradition in such details is the C. “Semel iuravi” (GT 492:5). There the data for the cephalicus over “luna perfecta” varies even more sharply: Bv has SO and the liquescent pitch MI; Y and Mp have FA with the liquescent pitch MI; K writes a cephalicus with SO-RE, V writes a cephalicus with SO-FA. And in R, instead of a cephalicus there is found a clivis with SO-MI, while E notates the letter “s” for the liquescent. Concerning the existence of a liquescent pitch, these sharply diverging indications do not permit a clear conclusion for the “c” by the cephalicus in L.

As a counter conclusion, for the sung rendition this means that there is no fundamental

interpretation for or against a slurring at the liquescent for the “c” by the cephalicus in L. Bv, A, Y, K, and Mp, e.g. in the In. “Probasti” (GT 474:5), have nonliquescent notation over “et visitasti,” in agreement with E. This means that at first glance one might presume that the “c” in L speaks against a liquescent pitch at the cephalicus. But the same four diastematic manuscripts are unanimous in giving a liquescent pitch SO at the cephalicus over “et in siti” in the Of. “Improperium” (GT 149:4), although L once again writes a “c” at the cephalicus. And this relativizes the previous impression.

E notates an “s” at the liquescent in this place. (Here I am not able to go into the question of whether an “s” speaks for or against a liquescent pitch.) In the In. “Misericordia” (GT 222:6), E in contrast writes “i” over “alleluia,” where L likewise has “c” by the cephalicus. Thus, the “c” in L finds no direct correspondence with the letters which are employed in E by the cephalicus. The witness of the diastematic manuscripts is once again non-uniform and extends from the nonliquescent in Bv and MP to the indication of a liquescent pitch in A, Y, K, and V, to the notation of a full pitch in R.

Two final conclusions are possible. Either the “c” in L truly concerns only the tempo with which a liquescent is to be performed, equally whether there is a liquescent pitch or not, and it simply hinders the singing of a liquescent with all too much broadness (which we perhaps tend to do fundamentally in this region). Or the “c” indicates a unique path in L, if one presumes that compact pronunciation goes along with a rapid rendition of the liquescent and this fundamentally prohibits an added pitch. Then the liquescent in this place would always be performed on the main note of the cephalicus without a marked slurring of the pitch. It cannot be stated which interpretation here is the correct one.

Summary and Look Forward

Perhaps a complete analysis of all “c” places in L, including their appearance in the offertory verses and in the pieces not recorded in the Graduale Triplex, will cast more light into this darkness. Yet, it could be rudimentarily shown with this brief presentation that no universally valid rules can be established in questions of *litterae significativae* with the liquescent. These few examples have shown how individual each case is. Above and beyond this, there are many further questions. Nino Albarosa has also concentrated especially on the matter of liquescent letters and has published an article on the “s” by the cephalicus in the St. Gall notation in the commemorative volume for Johannes Göschl’s 65th birthday. At this point at the end of my presentation I wish to place the title of his piece: “Proseguendo nei sondaggi” – “Let the investigation continue!” Many thanks for your attention.