Olifan, Graisles, Buisines and Taburs: The Music of War and the Structure and Dating of the Oxford Roland

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The Oxford text of the Chanson de Roland mentions four kinds of instruments. Both the Christian and the pagan armies are abundantly supplied with graisles. In addition to these, the Franks have Roland's olifan, the Saracens, buisines and taburs. Both graisles and olifan, but never buisines, are referred to as corns. All occurrences of these names are listed in the Appendix.² The individual verses are grouped in three columns, reflecting the focus of the narrative on the Christian army, the rearguard, or the Saracens. A principal purpose of this note is to draw attention to the manner in which the four instruments, both individually and as a group, function to structure the poem.³ We begin, however, by reviewing briefly what can be said concerning some of the problems associated with them. In this respect the Saracens' instruments are of particular interest. Musicologists have long associated the mention of buisines with the reappearance of trumpets in the medieval West. As to the Saracens' taburs, their appearance in the poem has been used to provide a terminus a quo for the Oxford version: mistakenly, as it turns out, since the well-known story of the drums at Zalaca is a purely legendary and late development.

 $^{^{1}\}mathrm{OF}$ names in a normalized spelling will be used throughout when referring to the instruments in the text of Digby 23.

²The verses quoted in the Appendix and containing the names of musical instruments have been given consecutive numbering and will be referred to by these numbers. In two instances, the preceding or following verse is also quoted, but not included in the numbering. We have used the text of *La Chanson de Roland*, édition critique par C. Segre, "Nouvelle édition revue, traduite de l'italien par M. Tyssens," tome I (Geneva, Droz, 1989). With a single exception (App. No. 11; see note 4 below), we have also followed the numbering of verses and laisses in that edition.

³So far only the *olifan* appears to have been discussed in any detail from this point of view: S. G. Nichols, Jr., "Roland's Echoing Horn," *Romance Notes* 5 (1963): 78-84; E. P. Kostoroski, "Further Echoes from Roland's Horn," *Romance Notes* 13 (1971): 541-544; see also S. G. Nichols, Jr., *Romanesque Signs: Early Medieval Narrative and Iconography* (New Haven: Yale University Press, 1978), pp. 180-191. Brault has pointed out the role of instruments as framing and scene-shifting devices: G. J. Brault, ed. and trans., *The Song of Roland: An Analytical Edition*, vol. 1 (University Park: Pennsylvania State UP, 1978), p. 176.

The Instruments: Corn

In the Oxford text, *corn* does not designate a specific instrument, but is used as a general term to refer to either *olifan* (Appendix Nos. 4, 15, 16, 18) or *graisle* (Nos. 19, 26, 33). Only once, in No. 11, is the meaning of *corn* not immediately clear. Here also, as in No. 10, it may be taken to refer to the Saracens' *graisles*, 4 but in any case the distinction between *corn* and *buisines* is maintained.

In other versions of the Chanson, *corn* does not have this general meaning, and is distinguished from *graisles*. Thus in Venice 4, vv. 3137-3138 of the Oxford version (App. Nos. 39-40) become

Per tuta l'oste faites li tambur soner Corni et busine et le grail molt cler.⁵

Olifan

Despite its near mythical character, the *olifan* presents fewer problems than any of the other instruments. Among the precious materials in use during the Middle Ages, ivory has for the historian the virtue that it could not be melted down, and so dozens of ivory horns,

⁴As it appears in the Oxford manuscript, just over a dozen lines separate No. 11 (v. 1468 in the edition of R. Mortier, Les textes de la Chanson de Roland, I: La version de Oxford (Paris, 1940)) from No. 10 (v. 1454) with its mention of Marsilies' seven thousand graisles. No. 11 is the second line of a laisse which, with the laisse following it, has been moved to a later place in the poem by a number of editors, including Brault and Segre. In that location, the corn of No. 11 (now v. 1629) remains undefined. The repositioning of the two laisses is based to a good extent on the evidence of the non-Oxford versions, which are taken in this instance to reflect more closely the archetype. It may be noted, however, that in V4 the corresponding line reads, Si fa soner ses grailes et ses busines. Cf. Brault, The Song of Roland, vol. 1, pp. 201-202 and notes 8 and 9, p. 421; La Chanson de Roland, édition critique par C. Segre, "Nouvelle édition revue, traduite de l'italien par M. Tyssens," tome II: Apparat de la rédaction et recherches sur l'Archétype (Geneva: Droz, 1989), pp. 215-216. For V4: R. Mortier, Les textes de la Chanson de Roland, II: La version de Venise IV (Paris, 1941; hereafter: Mortier, V4), v. 1673; G. Gasca Queirazza, S. J., ed. and trans., La Chanson de Roland nel testo assonanzato franco-italiano (L'Orifiamma, 1: Turin, 1954; hereafter: Queirazza), v. 1676.

⁵Mortier, V4, vv. 3324-3325; Queirazza, vv. 3330-3331.

"oliphants," are still preserved in various collections and church treasuries. 6

Graisles

These are used in large numbers in both the Christian and the pagan armies. At first there are one thousand in each (Nos. 1, 3), but later the Saracens have seven and the Christian sixty thousand (Nos. 10, 23). Twice their use by individuals is mentioned, by Margariz among the Saracens (no. 9) and by Geoffrey of Anjou among the Christians (No. 34).

The pairing of *graisles* and *olifan* under the name of *corns* suggests that the former should be seen as instruments having more or less the shape of animal horns; one of these appears in our Fig. 1.⁷ Beyond this, the text makes it difficult to go. Radulfus Niger, writing in 1170 or 1171, may have been the first to record the association of *graisle* with the Latin *gracilis* or *gratilis*, and modern writers have taken *graisle* to refer to a

⁶The most comprehensive discussion of both surviving and recorded ivory horns has been given by E. Kühnel in "Die sarazenischen Olifanthörner," Jahrbuch der Berliner Museen 1 (1959): 33-50, and Die islamischen Deutscher Verlag für Elfenbeinskulpturen, VII.-XIII. Jahrhundert (Berlin: Kunstwissenschaft, 1971). For a brief account of the 1959 article see I. Short, "A Note on our Eponymous Horn," Olifant 3 (1976): 259-261. Kühnel proposed Southern Italy as the source of a large number of ivory horns for which Hispanomauresque, Egyptian (Fatimid) and Byzantine origins had earlier been claimed. While Kühnel's proposals have been largely accepted, a group of thirteen olifants has more recently been assigned to a Venetian workshop active "from the end of the eleventh century to within the first third of the twelfth century." See D. M. Ebitz, "Fatimid Style and Byzantine Model in a Venetian Ivory Carving Workshop," in: The Meeting of Two Worlds: Cultural Exchange between East and West during the Period of the Crusades, ed. V. P. Goss, C. Verzar Bornstein (Kalamazoo, Michigan: Western Michigan University, Medieval Institute Publications, Studies in Medieval Culture XXI, 1986), pp. 309-329, Figures 48-55; dating: p. 318; see also Ebitz, "The Oliphant: Its Function and Meaning in a Courtly Society," in: The Medieval Court in Europe, ed. E. R. Haymes, Houston German Studies Vol. 6 (Munich: Wilhelm Fink Verlag, 1986), pp. 123-141.

⁷Trinity College Library, Dublin, MS 177 (*Vie de Seint Auban*), fol. 55v; S. Lewis, *The Art of Matthew Paris* (California Studies in the History of Art 21; Berkeley: University of California Press, 1987), pp. 380-387.

small or shrill-sounding instrument.⁸ The poem makes such a conclusion difficult. *Graisles* are repeatedly called *clers* (Nos. 26, 42, 46), but this adjective is also applied to, or shared with, *buisines*, here probably large trumpets (No. 48; No. 40). As the name is used here, *graisle* may be understood to refer to any instrument that could be called *corn*, except for the *olifan*.

Buisines

The line

Si fait suner ses corns et ses buisine

(App. No. 11) has been cited frequently in the musicological literature in connection with the reappearance of trumpets in the West at the time of the Crusades. The poem indicates that *buisines* are wind instruments used only by Saracens (Nos. 48; 11, 40) and, since they are never called *corns*, that they probably differ in appearance from *olifan* and *graisles*. A combination of pictorial and textual evidence suggests a type of instrument that, about the year 1100, would have met these requirements.

Fig. 1 is taken from Matthew Paris's *Life of St. Alban* (ca. 1250). ¹⁰ It shows the eighth-century King Offa together with a soldier wearing

⁸Radulfus Niger, *De re militari et triplici via peregrinationis Ierosolimitane*, ed. and introd. L. Schmugge, *Beiträge zur Geschichte und Quellenkunde des Mittelalters* vol. 6 (Berlin: Walter de Gruyter, 1977), p. 116, book I, section 39, and p. 185, book III, section 61; cf. S. Z‡ak, *Musik als "Ehr und Zier" im mittelalterlichen Reich* (Neuss: Verlag Dr. Päffgen, 1979), pp. 306-307. A detailed identification of "graisles" in terms of shape and sound was proposed by E. Bowles, "Unterscheidung der Instrumente *Buisine*, *Cor*, *Trompe* und *Trompette*," *Archiv für Musikwissenschaft* 18 (1961): 52-72, here 57-59; for a critique of Bowles's approach see Note 24 below.

⁹E. Buhle, *Die musikalischen Instrumente in den Miniaturen des frühen Mittelalter. Ein Beitrag zue Geschichte der Musikinstrumente. I. Die Blasinstrumente* (Leipzig: Breitkopf & Härtel, 1903), p. 28 note 4; Bowles, "Unterscheidung der Instrumente. . ." (1961), p. 63; H. M. Brown, "Buisine," in: *The New Grove Dictionary of Musical Instruments*, ed. S. Sadie (London: Macmillan Press, 1984), vol. 1, p. 282.

¹⁰See Note 7 above.

helmet and shield and blowing a horn (graisle?), and two musicians blowing trumpets. Similar trumpets, characterized by one or more knops or pommels, appear some fifty years earlier in several manuscripts that can be closely dated. One of these, al-Jazari's Book of Mechanical Devices (1206), was probably written and illustrated in southeastern Anatolia. One illustration (Fig. 2) shows a pair of trumpets with pommels among the instruments played by the musician-puppets of a water-clock. 11 A second manuscript, some ten years earlier (1195/1196), probably originated at Palermo: Petrus of Eboli's Liber ad honorem Augusti. 12 Here one of the full-page illustrations shows the entry of Tancred of Lecce, the last Norman king of Sicily, into Palermo in 1190 (Fig. 3).¹³ Tancred and his two sons are preceded by soldiers, horses and musicians. Leading the latter are three turbaned "trumpeters," 14 of whom the first has once more an instrument with the tell-tale pommel. Figs. 2 and 3 clearly suggest the Eastern or African origin of such trumpets, but a passage in the writings of the Calabrian abbot Joachim of Fiore (d. 1202) suggests that at this point they could also be employed in a purely Christian In his commentary on the Book of Revelation, Joachim interprets the tuba of Apocalypse 1:10 ("a voice like a great

¹¹Istanbul, Topkapi Palace Museum, Ms. A. 3472; J. M. Rogers, ed., *The Topkapi Saray Museum: The Albums and Illuminated Manuscripts* (Boston: Little, Brown, 1986), pp. 30-33 and Plate 7 For the dating and a discussion of the earlier literature see R. Ward, "Evidence for a School of Painting at the Artuqid Court," in: *The Art of Syria and the Jazira*, ed. J. Raby (Oxford: Oxford University Press, 1985), pp. 69-80. A version of the miniature from a fourteenth-century copy of the manuscript (Boston, Museum of Fine Arts, Ms. 14 533) has been frequently reproduced (e.g. T. Seebass, *Musikdarstellung und Psalterillustration im früheren Mittelalter* [Berne: Francke Verlag, 1985], Vol. 2, plate 34). Automata of this kind were of Greek origin: see the description of one such device in *Le Voyage de Charlemagne*, ed. P. Aebischer (Textes Littéraires Français 11; Geneva: Librairie Droz, 1965), vv. 350-361.

¹²Berne, Burgerbibliothek, cod. 120. The manuscript has been edited twice: *Liber ad honorem Augusti da Pietro da Eboli*, ed. G. B. Siragusa (Fonti de la Storia d'Italia 39; Rome: Istituto Storico Italiano, 1906), 2 vols.; Petri Ansolini de Ebulo, *De rebus siculis carmen*, ed. E. Rota (Rerum Italicarum Scriptores vol. 31, part 1; Città de Castello: S. Lapi, 1904).

 $^{^{13}}$ Fol. $^{102^r}$; reproduced in the editions of Siragusa (Plate VIII) and Rota (p. 30); see also Z^{\ddagger} ak, *Musik as "Ehr und Zier"* (Note 8 above), p. 76.

¹⁴Z[‡]ak's description, but two of the instruments could possibly be shawms.

trumpet") as an image of the Universal Church. 15 Joachim then proceeds to describe an *instrumentum ductile*, 16 an instrument of drawn or hammered metal, which corresponds to the trumpets of the miniatures: its first part is long and narrow, then there is a *nodus*, a knot or knop, and then the *tuba* widens to end in a final expansion, the flare of the trumpet.

Joachim does not indicate a vernacular name for his *tuba ductilis*. ¹⁷ The accounts of the Third Crusade, however, provide at least one instance where *tuba* is equated with *buisine*. The vernacular *Estoire de la Guerre Sainte* and the Latin *Itinerarium Regis Ricardi* both go back to the same source, ¹⁸ and both describe the disposition which Richard Lionheart made before the Battle of Arsuf during the retreat from Acco in 1191. According to the *Itinerarium*, Richard placed two *tubae* at the head of the army, two in the middle, and two in the rear, to give the signal for engaging the Turkish cavalry. ¹⁹ According to the *Estoire*, there were

Six busines qui soneroient, Quant vers les Turs retorneoient, Deus devant l'ost e deus deriere

¹⁵Joachim of Fiore, *Expositio in Apocalypsim*, Venice 1527 (repr. Frankfurt a.M.: Minerva G.m.b.H., 1964), foll. 40^r-41^r; M. Reeves and B. Hirsch-Reich, *The Figurae of Joachim of Fiore* (Oxford: The Clarendon Press, 1972), pp. 66-67.

¹⁶The identification of the instrument with one of the figures of Joachim's *Liber Figurarum* is based on a misreading of *instrumentum ductile* as *Zugtrompete* or slide-trumpet (*The Figurae* . . . , p. 124 and note 23).

¹⁷Cf. Num. 10:2: *tubas argenteas ductiles*. Joachim's contemporary, Radulfus Niger, gives a vernacular equivalent for the biblical *tibia*, "*que vulgo graciles vocantur*" (*De re militari*, book I, section 39), but fails to do so for *tuba*.

¹⁸L'Estoire de la guerre sainte. Histoire en vers de la Troisième Croisade (1190-1192) par Ambroise, ed. G. Paris (Paris: Imprimerie Nationale, 1887); Itinerarium Peregrinorum de Gesta Regis Ricardi, ed. W. Stubbs, Rolls Series 38, 1 (London: Longman, Green, Longman, Roberts and Green, 1864). On the common derivation of Itinerarium and Estoire see J. G. Edwards, "The Itinerarium Regis Ricardi and the Estoire de la Guerre Sainte" in: Historical Essays in Honour of James Tait, ed. J. G. Edwards et al. (Manchester: printed for the subscribers, 1933), pp. 59-77.

¹⁹*Itinerarium*, p. 269 (Book 4, Ch. 18).

E deus en mi d'autre maniere.²⁰

Eleven years later, at the departure of the fleet of the Fourth Crusade from Venice (1202), there were, according to Robert de Clari, "bien chent paire de busines, que d'argent que d'arain." North of the Alps, however, Wolfram von Eschenbach in his *Willehalm* (1210-1220) is quite explicit about the alien origin of the buisine:

aht hundert pusinen hiez blasen der künic kalopeiz. in sime lande man noch weiz daz pusinen da wart erdaht: uz Thusi di waren braht.²²

Is there an implication here that Wolfram's audience was no longer fully aware of the foreign origin of the instrument? (The poem was commissioned by Landgrave Hermann of Thuringia, who had been one of the leaders of the Third Crusade.²³) In any case, the references to *buisine* in the texts of around 1200 suggest a pattern similar to that of the manuscript illustrations: an instrument of alien (Muslim?) origin, but, at least in the Mediterranean, absorbed into Christian practice. It is easy to see a somewhat different situation a hundred years earlier: an

²⁰Estoire, vv. 6414-6418.

²¹Robert de Clari, *La Conquête de Constantinople*, ed. P. Lauer; Les Classiques Français du Moyen Age 40 (Paris: Champion, 1924), p. 13.

²² "Eight hundred *pusinen /* the king ordered to blow the gallop / In his land it is still known / that the *pusin* was invented there: / from Thusi they were brought;" Wolfram von Eschenbach, *Willehalm* VII, 360, 8-12, ed. W. Schröder (Berlin: De Gruyter, 1978). For this passage Schröder's text is preferable to the standard editions based on Lachmann and Leitzmann; cf. J. Bumke, "König Galopp (Zu Wolframs Willehalm 360,9)," *Modern Language Notes* 76 (1961), 261-263.

²³J. Bumke, *Mäzene im Mittelalter: Die Gönner und Auftraggeber der höfischen Literatur in Deutschland 1150-1300* (Munich: C. H. Beck'sche Verlagsbuchhandlung, 1979), p. 165; H. Patze, *Die Entstehung der Landesherrschaft in Thüringen*, Part 1 (Mitteldeutsche Forschungen 22, Cologne: Böhlau Verlag, 1962), pp. 252-253.

instrument familiar enough to have been given a vernacular, if rather learned, name, but to be associated only with Saracens. The poet of the Oxford version might well have described our illustration (Fig. 1, p. 165) as *Offa li reis fait suner sun corn et ses buisines*.

There is, however, an important caveat. Even if the *buisines* of the Oxford text are to be identified with Matthew Paris's trumpets, as instruments originally linked only to Saracens and differing in shape from "horns," it must be stressed that such an identification is far from universally valid. 24 This can be quickly shown by referring to the text of Venice 4. In the first section of this version, which corresponds to the Oxford text, the use of *buisines* is still limited to the pagans, but now there is a descriptive detail: instead of the Oxford version's

O: Met a sa buche une clere buisine²⁵

Venice 4 has

Here the identification with the Saracens' long trumpet becomes difficult. Later, in the Narbonne episode, a *buisine* appears as a hunting horn. As Aimeriget (Aimery) is pursuing a stag, he

tint la busine, al menton l'a tornée.²⁷

 $^{^{24}}$ In "Unterscheidung der Instrumente . . . " (note 8 above), Bowles attempts to give such generally valid definitions, using a wide variety of textual, but not pictorial, sources. H. Heyde takes Bowles to task for his indiscriminate use of sources (*Trompete und Trompeteblasen im europäischen Mittelalter*, Inaugural Dissertation, Karl-Marx-Universität, Leipzig, 1965, p. 11), but tends to regard any matching of name and object as impossible. We hope to have shown here that identification may be possible if a single text is studied in its entirety. See also Z^{\ddagger} ak, *Musik als "Ehr und Zier"* (note 8 above), pp. 72-73.

²⁵V. 3523 (our No. 47).

²⁶Mortier, V4, vv. 3690-3691; Queirazza, vv. 3713-3714.

²⁷Mortier, V4, v. 4086; Queirazza, v. 4112.

Finally, in the section which Venice 4 has in common with the rhymed versions, *buisines* have become part of the musical equipment of the Christian army:

De mant part font le greille soner Tabors et tubes et bosines corner.²⁸

We shall return briefly at the end of this section to the use of instruments in the rhymed versions.

Tabur

Gerard Brault has referred to *taburs* as "one of the rare bits of local color" in the poem.²⁹ Except for its association with the Saracens, however, the name *tabur* as it appears in the poem is probably as nonspecific as the modern "drum." We shall shortly attempt to justify this statement, but first the role of *tabur* as providing a *terminus a quo* for the Oxford version must be discussed. A proposal of this kind was first made in 1902 by A. Marignan, who assumed that the West became acquainted with Saracen drums only at the time of the Crusades.³⁰ Gaston Paris, defending an earlier dating of the poem, suggested that the *tabor* originated in Spain and possibly went back to Carolingian times.³¹ More recently, Menéndez Pidal stated that Christians in Spain first encountered the Saracen drums in 1086 at the Battle of Zalaca, a battle which halted the Reconquista for a hundred years.³² Martin de Riquer then suggested that the date of the battle provided a *terminus a quo* for the Oxford text, a conclusion that has been widely accepted.³³

²⁸Mortier, V4, vv. 5442-5443; Queirazza, vv. 5477-5478.

²⁹Brault, *The Song of Roland*, vol. 2, p. 263, note to v. 852.

 $^{^{30}}$ A. Marignan, La Tapisserie de Bayeux: Étude archéologique et critique (Paris: Ernest Leroux, 1902), pp. 156-158.

³¹G. Paris, Review of *La Tapisserie de Bayeux* (A. Marignan), *Romania* 31 (1902): 404-417, here 412-413.

³²R. Menéndez Pidal, *La España del Cid* (Madrid: Editorial Plutarco, 1929), Vol. 2, p. 361 (1947: p. 335).

 $^{^{33}}$ M. de Riquer, *Les chansons de geste françaises*, trans. I.-M. Cluzel (Paris: Librarie Nizet, 2 1957), pp. 75-76. In his edition for the Bibliothèque Bordas, Gérard Moignet takes

Unfortunately, the conclusion is not tenable. The historian Huici Miranda has shown that the story of Berber drums contributing to the Christian defeat at Zalaca is only one of several legendary accretions that entered the account of the battle some one hundred and fifty to two hundred years after the event. King Alfonso's dream of an elephant and a drum is first mentioned in a Universal History going to 1231, and the presence of drums in the battle seemingly appeared first in a work of 1274. The source which Menéndez Pidal drew upon was itself only compiled about the year 1310. The use of the Battle of Zalaca and thus of the year 1086 as a *terminus a quo* for the Oxford version must therefore be rejected.

Just when the term ta(m)bur or one of its cognates entered the Romance vernaculars is still unresolved. The evidence for the early presence of drums in Muslim Spain and Sicily is not very helpful in this

the *terminus a quo* of 1086 as established: "Il est établi que le texte . . . a été ecrit . . . (en tout cas) après 1086" (*La Chanson de Roland*, Texte original et traduction par G. Moignet [Paris: Éditions Bordas, 1969], p. 10; see also p. 83, note to v. 852). In his recent *Ganelon, Treason and the "Chanson de Roland"* (University Park: The Pennsylvania State University Press, 1989), E. J. Mickel records that "a reference to the use of camels and drums by the pagans has persuaded many that the battle of Zalaca in 1086 . . . must already have taken place" (p. 153).

³⁴A. Huici Miranda, *Las grandes Batallas de la Reconquista durante las invasiones africanas (Almoravides, Almohades y Benimerines)* (Madrid: Instituto de Estudios Africanos, 1956). On pp. 48-64 Huici Miranda discusses the gradual accumulation of legendary material in successive Arab accounts of the battle (Alfonso's dream: p. 53; the Berber drums: p. 59). For Huici Miranda's own comments on the survival of the legend of the drums see ibid., p. 72, and also the similar comments of I. Cagigas (our Note 36 below) quoted there. Huici Miranda's account of the Battle of Zalaca is accepted as authoritative by B. F. Reilly, *The Kingdom of León-Castilla under King Alfonso VI, 1065-1109* (Princeton: Princeton University Press, 1988), p. 186 note 2.

 35 Menéndez Pidal's account was based on the Kir_ta¤s(*Cartas*) of Ibn Abi ¤ Zar', who died between 1310 and 1320 (*Encyclopaedia of Islam* 2 1972, vol. 3, 694-695).

respect.³⁶ In any case, *tambur* seems already to have been current as the name of a jongleur's drum in Champagne toward the end of the eleventh century. It appears in a gloss by Rabbi Shelomo Yitzhaki (Rashi) of Troyes (d. 1106), whose commentaries on Bible and Talmud contain some three thousand Old (i.e. contemporary) French words.³⁷ The particular Aramaic text he is explicating refers to a "*tambura*", the longnecked lute of the Near East. Rashi, whose travels carried him no farther than the rabbinic academies of the Rhineland, reads this as "*tambur*" and goes on to describe the construction of a singleheaded drum struck with a slender stick. He concludes by saying that there are some who do this so skillfully that it really sounds like music.³⁸

In the Oxford text, *taburs* appear twice. They are sounded to assemble the army at Saragossa (App. No. 2), and are joined by *graisles* and *buisines* as Baligant gives the call to arms (No. 39 and 40). As Gaston Paris already noted, the noise of the Saracens' instruments is a familiar

³⁶I. de las Cagigas, *Los Mudejares* (Minorias etnico-religiosas de la edad media española 2, Madrid: Instituto de Estudios Africanos, 1948), p. 220, note 47 to p. 194, with references to the literature. The ignominy of the Berbers' loss of their drums in Sicily in 862 anticipates the fate attributed to Almanzor at Calatañazor more than a hundred years later (997 or 1002; S. G. Armistead, "Almanzor's Lost Drum," *La coronica* 8 (1979): 38-43).

³⁷A. Darmesteter, "Les gloses françaises de Raschi dans la Bible," Revue des Études Juives 53 (1907): 161-193; 54 (1907): 1-34, 205-235; 55 (1908): 72-83; 56 (1908): 70-98; A. Darmesteter and D. S. Blondheim, Les gloses françaises dans les Commentaires talmudiques de Raschi, vol. 1 (Bibliothèque de l'École des Hautes Études, Sciences historiques et philologiques, fasc. 254; Paris: Champion, 1929); D. S. Blondheim, Les gloses françaises dans les Commentaires de Raschi, vol. 2 (The Johns Hopkins Studies in Romance Literatures and Languages, extra vol. XI; Baltimore: The Johns Hopkins Press, 1937); M. Banitt, Rashi Interpreter of the Biblical Letter (Tel Aviv: Tel Aviv University, 1985). On Rashi cf. Encyclopaedia Judaica (Jerusalem: Keter Publishing House, 1972), vol. 13, coll. 1558-1565. Rashi's commentaries have remained basic in the Jewish tradition.

³⁸Rashi's gloss on Babylonian Talmud, Tractate Sotah 59b. A French translation of this passage is given by M. Catane, "Le monde intellectuel de Rashi," in *Les Juifs au regard de l'histoire: Mélanges Bernhard Blumenkranz*, ed. G. Dahan (Paris: Picard, 1985), pp. 63-86, here p. 75 (for *Sukka* read *Sotah*). On *tambura* as lute in the Babylonian-Jewish context cf. H. Avineri in *Encyclopaedia Judaica*, Vol. 12, col. 579.

feature of the accounts of Crusader battles and sieges; 39 and about the middle of the twelfth century the Muwahhid (Almohad) sultan 'Abd al-Mu'min used three strokes of an exceptionally large drum to signal the start of the day's march. 40 Nowhere in the Oxford version, however, are the *taburs* singled out as the earth-shaking instruments as which they appear, for instance, in the *Cantar del mio Cid*:

Ante roydo de atamores la tierra querie quebrar. 41

Apparently, the size, shape and sound of the Oxford *taburs* were left to the audience's imagination or experience.

The Instruments in Other Versions

At this point, the economy and care with which the Oxford poet treats the instruments of the two armies should be clear. A comparison with the texts of other versions shows that in this respect the Oxford text stands alone. ⁴² We have already seen differences between Venice 4 and Oxford in the use of *corn* and *buisine*, but the lines of Venice 4 quoted above also show that not only *bosines* but *tabors* as well form part of the equipment of the Christian army. The corresponding passage of the rhymed version at Châteauroux gives

De meintes parz fisent grasles soner

³⁹G. Paris, Note 31 above.

⁴⁰A. Huici Miranda, "Al-H_ulal Al-Maws‡iyya": Crónica arabe de las Dinastias Almoravide, Almohade y Benimerin (Spanish trans., Tetuan: Editora Marroqui, 1951), p. 182. On the reliability of the Al-H_ulal for 'Abd al-Mu'min see Huici Miranda's Introduction, p. 16.

 $^{^{41}\}mathit{Cantar}$ del mio Cid, ed. R. Menéndez Pidal (Madrid: Bailly-Baillière, 1911), v. 696.

⁴²This aspect of the vocabulary of Digby 23 has been frequently overlooked. In his important glossary in Bédier's *Commentaires*, Foulet gives *trompette* for both *buisine* and *graisle* (L. Foulet, *Glossaire*, in J. Bédier, *La Chanson de Roland commentée* [Paris: Piazza, 1927], pp. 344, 397). Both Brault, 1978, and Burgess, 1990, render *buisine* first as "trumpet" (our App. No. 11: Brault, v. 1629; Burgess, v. 1468; App. No. 39: v. 3138), but later as "bugle" (v. 3263: App. No. 42; v. 3523: App. No. 47). (Brault, *The Song of Roland*, vol. 2; G. Burgess, *The Song of Roland* [Harmondsworth: Penguin Books, 1990]).

Tabors et timbres et bugleraus corner La messe est dite \dots 43

This may be compared to Robert de Clari's description of the Crusaders' departure from Venice, where the *chent paire de busines* are followed by *tant de tymbres et tabours et autres instrumens que ch'estoit une merveille.* ⁴⁴ We have already noted that at least in the first part of the poem, Venice 4 keeps intact the distinction between the Christians' and the Saracens' instruments. This is no longer true of the corresponding section of the rhymed versions. At Roncevaux, Oliver has exhorted the rearguard to fight the good fight; at which point,

Qi donc oist: "Monjoie!" reclamer, Cors et bosiness et ces grailles soner, A grant merveille le poist hom escouter.⁴⁵

But the worst is still to come. As Charlemagne's army approaches, a Saracen remarks,

De cels de France oi meint olifant braire, Mainte busine et soner et retraire. 46

If a pagan can be believed, even the *olifan* has lost its uniqueness.

⁴³R. Mortier, Les textes de la Chanson de Roland, IV: Le manuscrit de Châteauroux (Paris, 1943), vv. 7359-7361.

⁴⁴Cf. note 21 above. According to the *Estoire de la guerre sainte* (note 18 above), Richard I was received by the Christians of Acco with "timbres et busines, / Corns e estives et troines" (vv. 2359-2360). For an indication of the variety of instruments found in the chansons de geste, cf. J. M. Lamalfa Diaz, "La culture musicale dans les chansons de geste," in: *Essor et fortune de la Chanson de geste dans l'Europe et l'Orient latin*, Actes du IX. Congrès International de la Société Rencesvals, 1982 (Modena: Mucchi Editore, 1984), pp. 111-130.

⁴⁵Mortier, Le manuscrit de Châteauroux, vv. 2081-2083.

⁴⁶*Ibid.*, vv. 3549-3550.

The precision of the Oxford poet's use of his musical vocabulary makes possible the structuring function of the instruments, and to this we now turn.

The Text

Instruments appear for the first time seven hundred verses into the poem: a thousand *graisles* sound as the Frankish army breaks camp at Galne (App. No. 1). 47 With the scene shifting to Saragossa, *taburs* are sounded as the Saracens gather (2) 48 , and then once more a thousand *graisles* are heard (3). But now they are those of the pagan host approaching Roncevaux, and, heard by the rearguard (v. 1005: *Granz est la noise, si l'oïrent Français*), their sound establishes the first contact between the opponents.

Almost immediately there follows the first *scène du cor*. Oliver's direct appeal to Roland begins with the third line of laisse 83, and at this stage only the ordinary word for "horn" appears: (4) *Cumpaign Rollant, kar sunez vostre corn*. In the next laisse the name of Roland's horn appears for the first time, and in the first line: (5) *Cumpainz Rollant, l'olifan car sunez*, and then, in the third and final repetition of Oliver's appeal, *olifan* has moved to the end of the line, the assonance *olifan-Rollant* now dominating the laisse: (6) *Cumpainz Rollant, sunez vostre olifan*. There is clearly a crescendo both in the vocabulary used to refer to Roland's horn, and in its position within laisse and verse.⁴⁹

⁴⁷A number of editions introduce *graisles* in emending the defective v. 738; for a recent example see Burgess, *The Song of Roland* (note 42 above), pp. 188 (OF), 52 (trans.). For a discussion and critique of such emendations see Segre's comments to this verse, *La Chanson de Roland*, édition critique, tome II (1989), p. 108.

 $^{^{48}}$ From this point on, "App. No." will be omitted in references to the Appendix.

⁴⁹In his discussion of the first *scène du cor* Segre speaks of "*effetti di crescendo*" (C. Segre, *La tradizione della Chanson de Roland* [Milan: Riccardo Ricciardi, 1974], p. 176). The stepwise introduction of new information and heightening of emphasis in these and other *laisses similaires* has been discussed recently by S. Fleischman: "A Linguistic Perspective on the *Laisses Similaires*: Orality and the Pragmatics of Narrative Discourse," *Romance Philology* 43 (1989), pp. 70-89.

Roland refuses to sound the *olifan* (7, 7), and it is the Saracen Margariz who first uses a horn, *graisle* (here spelled *gresle*), to rally his people (9). Margariz's detachment is defeated, but seven thousand *graisles* signal the approach of the main Saracen army under Marsilies (10), and with it the last of the four instruments makes its appearance, the Saracens' *buisine* (11).

As only sixty of the rearguard remain, Roland decides to sound the olifan (12). The wording which describes his physical gesture is important: (13) Rollant ad mis l'olifan a sa buche; we shall encounter a similar description once more later in the poem. At this point the action moves back and forth repeatedly between the rearguard and the main body of the Frankish armv. 50 and the function of the instruments as scene-shifting devices here is particularly clear (15-16, 17-18). When the Frankish army is at last in motion, the first dialogue between instruments appears, Roland's olifan sounding in the distance (21) and the army's graisles responding antiphonally: (20) Sunent cil graisle e derere e devant / E tuit rachatent encuntre l'olifant. With Roland's strength waning (14-15, 17, 22) Charlemagne's response becomes more and more active (16, 18-19, 23). As Roland for the last time feebly sounds the olifan (22), sixty thousand graisles go into action (23), a musical climax that also marks a turning point: it is now the Saracens' turn to hear the sound of an approaching army (24-26).

When Charlemagne reaches Roncevaux, he finds Roland and his companions dead, and the *olifan*, too, has been damaged. Roland has used it to kill his last Saracen, and the mouth of the *olifan*, its wide end, has been split: (30) *Fenduz en est mis olifan el gros*. As he lies down to die, Roland places both sword and *olifan* under his body. The damage to the *olifan* will not impair its eventual recovery, but this does not happen until Charlemagne, having pursued (23) and destroyed Marsilies' army,

⁵⁰Nichols discusses the implications of *corn* and *olifan* in this passage, but isolates it in this respect from the rest of the poem (S. G. Nichols, Jr., *Romanesque Signs* [note 3 above], pp. 180-191; in the references to the Hebrew for *horn* in Gen. 22:13, pp. 181 *et seq.*, *Qran* should read *qeren*).

returns to Roncevaux and to the burial of the dead. The Emperor commands Geoffrey of Anjou, (33) "Sunez en vostre corn!" and (34) Gefreid d'Anjou ad sun greisle sunet. We have here the clearest identification of graisle as a species of corn, but, beyond this, this passage, together with the earlier example of Margariz (cf. [9]), illustrates the use of graisles even by high-ranking individuals in both armies. As to the olifan, with a new pagan army approaching, Charlemagne orders two barons to carry Roland's sword and horn (35). Thus resurrected, the olifan now moves from its location with the rearguard to the van of the army, a visible and audible palladium. Its sound dominates the magnificent image of the Christian army descending towards its final encounter with the pagans: (36, 37) Sunent cil greisle e derere e devant / Sur tuz les altres bundist li olifan. Olifan and graisles, Roland's spirit and the Frankish host, have come together at last.

We are now in the middle of the Baligant episode, but the instruments of the two armies are handled as consistently as in the earlier parts of the text.⁵¹ Baligant has come to recover Spain for the Saracens, and, as the Christian army approaches, he orders the graisles sounded (38). What we actually hear is the entire musical equipment of the Saracens: taburs, buisines, graisles (39-40). Very soon, however, an ominous note intrudes: for the last time, the sounds of an approaching army are heard. But if earlier it was the sound of *graisles* only, whether the Saracens' (3, 10) or the Christians' (23-26), now the presence of the olifan introduces a new element. Baligant hears the dialogue between olifan and graisle, and remarks, "Cil est mult proz ki sunet l'olifant" (41-42). The Saracens' buisines are heard again (43), and then we are reminded twice of the sounds of Charlemagne's army (44-45, 46-47). As the ensuing battle moves towards a crisis, Baligant sounds a buisine in an action that recalls both Margariz' and Roland's: the Emir Met a sa buche une clere buisine / sunet la cler (58), a physical gesture that matches Roland's (12), while its effect, Par tut le camp ses cumpaignes ralient (v. 3523), corresponds to Margariz' intention: Sunet sun gresle pur les soens ralier (9). Baligant's behavior is significantly different from that of

⁵¹With regard to the *olifan*, this observation was made by Kostoroski, "Further Echoes from Roland's Horn" (Note 3 above), pp. 543-544.

Charlemagne, who himself does not make use even of the *olifan*, but assigns it to one of the barons. The Emir's final effort is in vain: *buisine* cannot prevail against *olifan*. *Paien unt tort e chrestiens unt dreit*, and in single combat Baligant goes down before the Emperor. The *olifan*'s duty is done: it will achieve its destiny as a sacred relic at Bordeaux *Desur l'alter sein Sevrin le baron*, deposited there by Charles *plein d'or e de manguns* (49).

As the Emperor offers the *olifan* at Bordeaux (v. 3684), Saragossa is safely in Christian hands (vv. 3676-3678). Looking back at this point, we find that the "neutral" *graisles* are first heard (1, v. 700) just after Ganelon's deceptive offer of the keys of Saragossa (v. 677). Between the first appearance of *graisles* and the final coming to rest of the *olifan* (49, v. 3686), the Saracens' instruments mark the rise and fall of the pagans' fortunes, from the sound of *taburs* as their army first gathers at Saragossa (2, v. 852) to Baligant's *buisine* at the final battle (48, v. 3523). At the very beginning of the poem, Saragossa had been presented as a problem (laisse 1): after seven years of campaigning it was still in the hands of the pagans. By the poem's end, the Christian army is in possession of the city. *Graisle*, *tabur*, *buisine* and *olifan* can thus be seen as framing the tale of the Taking of Saragossa. The four instruments are instruments of the music of war, ⁵² but they are also instruments serving as one more way of structuring the poem.

⁵²Ganelon's attempt to belittle the significance of Roland's horn call, v. 1780, *Pur un sul levre vait tute jur cornant*, is the only instance where a non-military use of an instrument is mentioned in the Oxford text.

Appendix A: Citations from the Segre edition of the *Chanson de Roland*

The Christian Army			The Saracens	The Rearguard ^a		
No.						
1	54	700b	Par mi cel ost funt mil grailles sund	er:		
2	68	852	Ms ^c En Sarraguce fait suner ses	<u>taburs</u> ;		
3	79	1004	Sunent mil grailles, por ço que pl	us bel seit;		
4	83	1051	"Cumpaign Rollant, kar sunez vostre	<u>corn</u> , "d		
5	84	1059	"Cumpainz Rollant, l'olifan car sunez			
6	85	1070	"Cumpainz Rollant, sunez vostre olifa	<u>an</u> , "		
7	87	1101	"Vostre <u>olifan</u> , suner vos ne l deignast	es;"		
8	92	1171	"Vostre <u>olifan</u> ne deignastes suner,"			
9	103	1319	Mg Sunet sun gresle pur les soens	s ralïer.		
10	112	1454	.VII. milie graisles i sunent la me	nee:		
11	113 ^e	1468	Ms Si fait suner ses cors et ses bui	<u>isines</u> .		
12	129	1702	Ço dit Rollant: "Cornerai l' <u>olifant</u> ,"			
13	133	1753	Rollant ad mis l' <u>olifan</u> a sa buche,			
14	134	1762	Par grant dulor sunet sun <u>olifan</u> .			
15	134	1765	Del <u>corn</u> qu'il tient l'oïe en est mult ga	rant:		
16	134	1768	Ce dist li reis: "Jo oi le <u>corn</u> Rollan	t!"		
17	135	1787	L' <u>olifan</u> sunet a dulor e a peine.			
			•			

^a These typographical conventions will be used to distinguish the three separate frames of reference: The Christian Army in Roman type, **the Saracens in bold type**, and *the Rearguard in italic type*.—Ed.

b With on exception (No. 11; see Note "e" below), the numbering of laisses and verses follows that of *La Chanson de Roland*, C. Segre, 2d ed. (Geneva: Droz, 1989).

^c In a number of instances we have used sigla to indicate speaker or subject: *Ms:* Marsilies (Nos. 2, 11); *Mg:* Margariz (No. 10); *P:* païen (No. 24); *T: Turpin* (No. 27); *B:* Baligant (Nos. 38, 41, 48).

d Direct speech has been placed in quotation marks.

 $^{^{\}rm e}$ For this verse we have retained the numbering corresponding to its position in Digby 23 (cf. note 4 *supra*). The corresponding numbering in Segre's edition is liasse 125, v. 1629.

18	135	1789	Ço dist li reis: "Cel corn ad lunge aleine!"
19	136	1796	Li empereres ad fait suner ses <u>corns</u> .
20	138	1832	Sunent cil graisle e derere et devant
21	138	1833	E tuit rachatent encuntre l'olifant.
22	156	2104	Trait l'olifant, fieblement le sunat.
23	156	2110	"Sunez vos graisles tant quë en cest ost ad!"
	156	2111	Seisante milie en i cornent si halt,
24	157	2116	P "De cels de France oëz suner les graisles!"
25	158	2132	De cels de France les corns avuns oït:
26	160	2150	De cels de France odum les graisles clers,
27	165	2224	T Tendit sa main, si ad pris l' <u>olifan</u> :
28	168	2263	Prist l' <u>olifant</u> , que reproce n'en ait,
29	170	2287	Tient l' <u>olifan,</u> qu'unkes perdre ne volt,
30	170	2295	"Fenduz en est mis <u>olifans</u> el gros,"
31	174	2359	Desuz lui met s'espee e l' <u>olifan</u> .
32	79	2443	Li empereres fait ses graisles suner,
33	211	2950	Ço dist li reis: "Sunez en vostre <u>corn</u> !"
34	212	2951	Gefreid d'Anjou ad sun greisle sunét;
35	217	3017	"L'un port l'espee a l'altre l' <u>olifant</u> ,"
36	227	3118	Sunent cil greisle e derere e devant;
37	227	3119	Sur tuz les altres bundist li <u>olifant</u> .
38	228	3136	B "Sunez vos grailes, que mi paiens le
39	229	3137	Par tute l'ost funt lur <u>taburs</u> suner
40	229	3138	E cez <u>buisines</u> e cez <u>greisles</u> mult cler.
41	231	3193	B "Cil est mult proz ki sunet l' <u>olifant</u>
42	231	3194	D'un graisle cler racatet ses cumpaignz,"
43	235	3263	Granz sunt les oz u cez <u>buisines</u> sunent,
44	238	3301	Li emperere i fait suner ses greisles
45	238	3302	E l' <u>olifan</u> , ki trestuz les esclairet.
46	239	3309	Sunent ces greisles, les voiz en sunt mult cleres,
47	239	3310	De l' <u>olifan</u> haltes sunt les menees.
48	256	3523	B Met a sa buche une clere <u>buisine</u> ,
	258	3685	Desur l'alter sein Sevrin le baron
49	258	3686	Met l' <u>oliphan</u> plein d'or e de manguns:

Appendix B: List of Figures

- Fig. 1, p. 165: "King Offa Setting Out on His Expedition." Matthew Paris, *Vie de Seint Auban*, Trinity College Library, Dublin, MS 177 fol. 55v; ca. 1250. (The Board of Trinity College Library, Dublin.)
- Fig. 2, p. 166: Musical Water-Clock. Al-Jazari, *The Book of Mechanical Devices*, Istanbul, Topkapi Palace Museum, Ms. A. 3472, fol. 5b; dated March-April 1206 (Sha'ban 602).
- Fig. 3, p. 167: Tancred of Lecce's Entry into Palermo. Petrus of Eboli, *Liber ad honorem Augusti*, Berne, Burgerbibliothek, cod. 120, fol. 102r; 1195-1196.

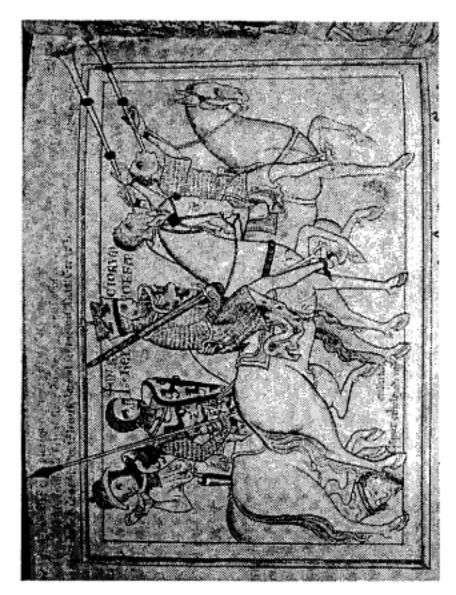


Figure 1



Figure 2



Figure 3