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BERNARD S. BACHRACH

ANGEVIN CAMPAIGN FORCES IN THE REIGN OF FULK NERRA,  
COUNT OF THE ANGEVINS (987-1040)\*

The Angevin state in the reign of Fulk Nerra, 987-1040, was one of the best organized and effectively administered territorial principalities in *Francia Occidentalis*. Fulk and his predecessors had defeated the divisive tendencies inherent in the process of incastellation which resulted in the »dissolution of the *pagus*« and which had fragmented political power in so many other regions. In the Angevin polity, and perhaps this is a less controversial term than state, both the aristocracy and the church were firmly under governmental control. Manifestations of disorder such as adulterine fortifications, uncontrolled private warfare, popular heresy, millennial agitation, and the peace of God are noteworthy by their absence from Fulk's lands<sup>1</sup>.

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1 The basic works on this period are LOUIS HALPHEN, *Le comté d'Anjou au XI<sup>e</sup> siècle*, Paris 1906, and Olivier GUILLOT, *Le comte d'Anjou et son entourage au XI<sup>e</sup> siècle*, Paris 1972, 2 vols. In recent years various aspects of Fulk Nerra's reign and its background have been examined by Bernard S. BACHRACH: Enforcement of the Forma Fidelitatis: The Techniques Used by Fulk Nerra, Count of the Angevins (987-1040), in: *Speculum* 59 (1984) p. 796-819; ID., The Angevin Strategy of Castle Building in the Reign of Fulk Nerra, 987-1040, in: *The American Historical Review* 88 (1983) p. 533-560; ID., Fortifications and Military Tactics: Fulk Nerra's strongholds circa 1000, in: *Technology and Culture* 20 (1979) p. 531-549; ID., Robert of Blois, Abbot of Saint-Florent de Saumur and Saint-Mesmin de Micy (985-1011): a study in small power politics, in: *Revue Bénédictine* 88 (1978) p. 123-146; ID., A Study of Feudal Politics: Relations between Fulk Nerra and William the Great, 995-1030, in: *Viator* 7 (1978) p. 111-122; ID., The Family of Viscount Fulcoius of Angers: Some Methodological Observations at the Nexus of Prosopography and Diplomats, in: *Medieval Prosopography* 4.1 (1983) p. 1-9; ID., Geoffrey Greymantle, count of the Angevins 960-987: A Study in French Politics, in: *Studies in Medieval and Renaissance History* 17 (1985) p. 3-67; ID., The Idea of the Angevin Empire, in: *Albion* 10 (1978) p. 293-299; ID., Fulk Nerra and His Accession as Count of Anjou, in: *Saints and Scholars and Heroes: Studies in medieval culture in honour of Charles W. Jones*, eds. M. KING and W. STEVENS, Collegeville, Minn., 1979, 2, p. 331-341; ID., Henry II and the Angevin Tradition of Family Hostility, in: *Albion* 16 (1984) p. 111-130; ID., King Henry II and Angevin Claims To The Saintonge, in: *Medieval Prosopography* 6.1 (1985) p. 23-45; ID., The Cost of Castle Building: The Case of the Tower at Langeais, 992-994, in: *The Medieval Castle: Romance and Reality*, eds. K. REYERSON and F. POWE, Dubuque, Iowa 1984, p. 46-62; ID., Some Observations on the Origins of Countess Gerberga of the Angevins: An Essay in the application of the Tellenbach-Werner Prosopographical Method, in: *Medieval Prosopography* 7.2 (1986) p. 1-23; ID., The Pilgrimages of Fulk Nerra, Count of the Angevins, 987-1040, in: *Religion, Culture, and Society in the Early Middle Ages*, ed. T. NOBLE, et al., Kalamazoo 1987, p. 205-217; ID., The Practical Use of Vegetius' *De Re Militari* During the early Middle Ages, in: *The Historian* 47 (1985) p. 239-255; ID., Pope Sergius IV and the Foundation of the Monastery at Beaulieu-lès-Loches, in: *Revue Bénédictine* 95 (1985) p. 240-265; and ID., The Angevin Economy, 960-1060: Ancient or Feudal, in: *Studies in Medieval and Renaissance History* 19 (1988) p. 3-55.



Fulk extended his power and influence by expropriating the holdings of his adversaries throughout the Angevin *pagus*; this is particularly clear in the Saumurois. He also extended the limits of the *pagus* by incorporating the Mauges region and much of the northern Poitou. However, the Angevin state reached well beyond the frontiers either of the old Carolingian *pagus* or even of the newly extended *pagus*. The northern frontier extended along the valley of the Loire river from the *castrum* of Vendôme in the east to la Flèche in the west with strongholds located between them at about thirty kilometer intervals (20 miles) in order to secure the *limes*. From la Flèche the frontier turned north to the fortifications at Malicorne some fifteen kilometers distant and then continued west to Sablé, Château-Gontier and Craon. The western frontier continued south from Craon along the valley of the Mayenne to le Plessis-Macé and Angers. Along the Loire a series of strongholds from Rochefort carried Fulk's banner west to Montjean, Champtocé and Saint-Florent-le-Vieil. From Saint-Florent-le-Vieil the frontier went south again along the valley of the Euvre to the strongholds of Montrevault and Beaupréau and finally continued southwest to Montfaucon. From this stronghold the southern frontier extended to Maulévrier, Vihiers and Passavant, to Montreuil-Bellay, Moncontour, Mirebeau, Faye-la-Vineuse, le Nouâtre, la Haye, PreUILly, and Buzançais. From Buzançais the eastern *limes* wended their way north through the valley of the Indre to Châtillon and Loches, then east to Montrésor and on to Saint-Aignan, Montrichard, Amboise, across the Loire to Morand and Vendôme<sup>2</sup> (see mapp. 69).

Within these borders, by the time of Fulk's death in 1040, only Tours and Île-Bouchard were not under Angevin control and the task was completed by Geoffrey Martel in 1044 as a result of his victory over Count Theobald of Blois at Nouy. Within the frontiers delineated above, the count controlled several dozen strongholds which created a defence in depth that made a successful enemy attack, even on a small scale, exceptionally difficult. In addition, beyond the frontiers, Fulk dominated the count of Nantes and the count of Maine. The freedom of action of the count of Poitou was severely circumscribed and with the murder of Count Alan the comté of Rennes ostensibly became an Angevin satellite. The Angevins also controlled the important stronghold of Saintes in the south and played a major role in the Gâtinais to the east<sup>3</sup>.

That Fulk's impressive political success was earned, at least in part, through his military abilities was recognized by contemporary and near contemporary observers and has been highlighted by modern scholars. The Angevin count has won particular acclaim for building large numbers of stone fortifications and for his development of a sound strategy based upon these strongholds. Indeed, among French scholars, Fulk has long been called »le grand bâtisseur«, i. e. the great builder<sup>4</sup>.

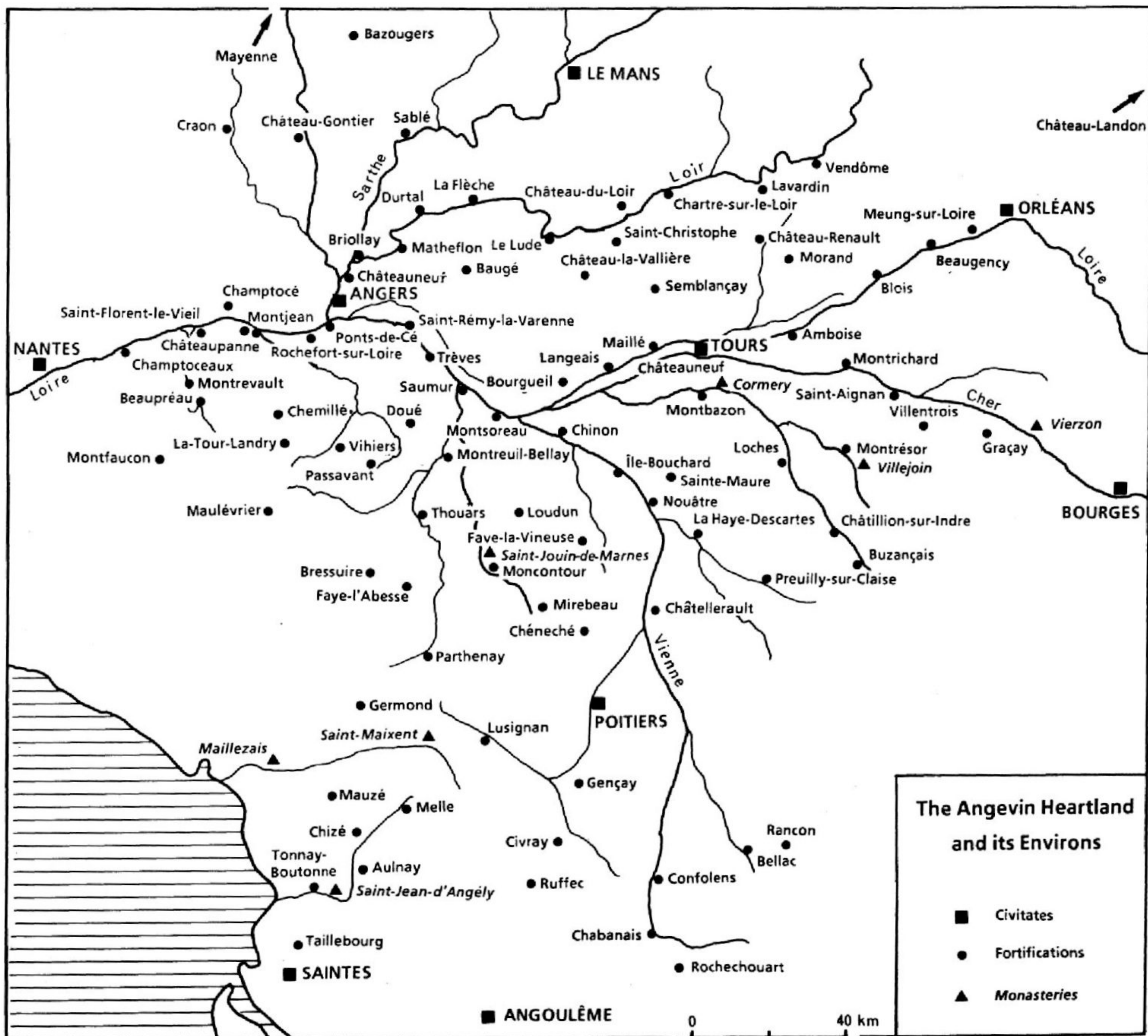
By contrast with the attention given to Fulk as a »defensive« genius, comparatively little has been written concerning his offensive military operations. Medieval chron-

2 BACHRACH, *The Angevin Strategy of Castle Building* (see n. 1) p. 533-560.

3 *Ibid.*, and BACHRACH, *Forma Fidelitatis* (see n. 1) p. 796-819.

4 Richard SOUTHERN, *The Making of the Middle Ages*, New Haven 1953, p. 83-87, provides a fascinating sketch of Fulk »the builder« which unfortunately now is somewhat out of date. See BACHRACH, *The Angevin Strategy of Castle Building* (see n. 1) p. 533-560; and BACHRACH, *Forma Fidelitatis* (*ibid.*) p. 796-819, for more current and detailed information.





**The Angevin Heartland and its Environs**

- Civitates
- Fortifications
- ▲ Monasteries

0 40 km



iclers did recognize the importance of his great victories at Conquereuil and Pontlevoy in 992 and 1016, respectively, the *duo campestris prelia valde magna* highlighted in the »Historia« written by his grandson Fulk-le-Réchin<sup>5</sup>. However, despite considerable information available concerning these struggles, modern scholars have made no noteworthy effort to give them the attention they deserve both from a tactical and a strategic perspective. Indeed, none of Fulk's many field operations has been the subject of the detailed research which would place them within the military history of *Francia Occidentalis* during the period between the Viking invasions and William the Conqueror<sup>6</sup>.

At present, sufficient research has not been carried out to provide either the necessary detail to explore Fulk's field operations in depth – there is insufficient space to do so here in any event – or to discuss the general characteristics of the Angevin count's offensive tactical and strategic thinking. Indeed, before the texts can be explicated to pursue the objectives noted above in the thorough manner that is required, a substantial understanding must be developed of the order of magnitude of Fulk's field armies. To put it simply, we cannot deal either with Fulk's strategy or his tactics in a serious way until we have ascertained whether he commanded tens, hundreds, or thousands of effectives. This will be the task approached in the following pages.

The study of all areas of medieval military history is fraught with difficulty. But if there is one area that more consistently than any other presents intractable problems, it is numbers. Scholars have long affirmed that medieval chroniclers cannot be trusted to provide accurate numbers even when they were eye-witnesses to the events they report. The chronicler William of Poitiers, who had a noteworthy career as a *miles* before entering the church and obtaining a »classical« education, is often mentioned to illustrate the hopelessness of the situation when it comes to acquiring accurate figures concerning troop strength. Although William was not an eye-witness to the events of the Norman conquest, he was Duke William's chaplain and thus had ample opportunity to learn the facts from those at the court who had participated<sup>7</sup>. William does, indeed, provide much reliable data on the entire campaign but when he comes to give a figure for the size of the Duke's army he observes: »50000 *milites* were fed at his (the Conqueror's) expense« while in camp and later he places the following speech in the duke's mouth: »nor would I doubt my

5 HALPHEN, *Le comté* (see n. 1) p. 20–25, and 33–36, reviews the sources for the battles at Conquereuil and Pontlevoy, respectively. For the treatment by Fulk le Réchin, Fulk Nerra's grandson, see: *Fragmentum Historiae Andegavensis*, eds. LOUIS HALPHEN and René POUPARDIN, in: *Chroniques des Comtes d'Anjou et des seigneurs d'Amboise* (cited hereafter as CCA) p. 234; and SOUTHERN, *The Making of the Middle Ages* (see n. 4) p. 83, who provides an English summary.

6 This period is conspicuously neglected for the West in the old major studies. See, for example, Hans DELBRÜCK, *History of the Art of War within the Framework of Political History*, 3, ed. and trans. Walter J. RENFROE, jr., Westport, Conn. 1982; Charles OMAN, *A History of the Art of War in The Middle Ages*, London 1924, I; and Ferdinand LOT, *L'Art militaire et les armées au Moyen Age en Europe et dans le Proche-Orient*, Paris 1946, I. Even the excellent studies by J. F. VERBRUGGEN, *The art of warfare in western Europe during the Middle Ages from the Eight Century to 1340*, trans. Sumner WILLARD and S. C. M. SOUTHERN, Amsterdam 1977; and Philippe CONTAMINE, *War in the Middle Ages*, trans. Michael JONES, Oxford 1984, seriously neglect this era. See, in particular, the bibliography mustered by CONTAMINE, p. 319–321.

7 See, for example, DELBRÜCK, *Art of War* (see n. 6) p. 3, 151–152.



ability to destroy him and his had I but 10000 men of the same bravery as the 60000 that, in fact, I lead«<sup>8</sup>.

Recently, as more detailed examination of the narrative texts has been undertaken in connection with the jejune documentary sources and the far more abundant archaeological data, some scholars have evidenced less pessimism than their predecessors. For example, it has been shown that the »Chronicle of Saint Maixent«, which was composed in Aquitaine, far distant from Normandy, and which found its final form some sixty years after the Conquest, provides a reliable estimate of 14000 for the size of Duke William's total force. It seems established now that the chronicler enjoyed a special relationship with the viscount of Thouars whose grandfather or perhaps great grandfather, Aimery, had accompanied the Conqueror in 1066<sup>9</sup>.

These data also illuminate William of Poitiers's quotation from the duke's speech, cited above, which is alleged to have been made for Harold's benefit well before the battle of Hastings. The exaggeration, however, is the Conqueror's who was trying to mislead his adversary and not that of the chronicler. The duke likely had only 10000 effectives ready for battle of the 14000 mentioned in the »Chronicle of Saint Maixent« after leaving garrisons at Pevensey and Hastings and accounting for non-combatant ships' crews, clerics, and artisans<sup>10</sup>. Indeed, William of Poitiers' observation that upon landing at Pevensey the duke led a party of twenty-five *milites* on a mounted reconnaissance of the area surely exhibits no numerical exaggeration<sup>11</sup>.

Clearly, each narrative source must be examined in its own right and each item within a particular text must be subjected to detailed study regardless of what may perhaps be the »Tendenz« of the piece as a whole. The twelfth-century Norman poet Wace has been alternately mined for useful information and condemned as an unreliable and distant witness of the Conquest. This is particularly the case with regard to numbers. However, he provides the figure 696 for the number of ships in Duke William's fleet. Wace claims that this is the number that was told to him by his father who was a young boy at the time of the invasion and may even have witnessed the departure from Saint Valery. The point to be made is that this number for William's ships, after being attacked for years by many scholars, now is regarded as essentially accurate because it fits well with the information found in the so-called »ship list« which specialists today have established to be a reliable copy of an earlier document<sup>12</sup>.

Just as the long-held position that medieval chroniclers cannot be trusted to provide accurate numbers is being gradually nuanced so too is the no less firmly held

8 Guillaume de Poitiers, *Histoire de Guillaume le Conquérant*, ed. and trans. Raymonde FOREVILLE, Paris 1952, p. 150, 170.

9 Three recent articles, each with additional data and argumentation, in 'Anglo-Norman Studies' focus on this topic: Jane MARTINDALE, *Aimeri of Thouars and the Poitevin Connection*, in: *ibid.* 7 (1985) p. 225–245; B. S. BACHRACH, *Some observations on the Military Administration of the Norman Conquest*, in: *ibid.* 8 (1986) p. 1–25, esp. p. 3–4; and George BEECH, *The Participation of Aquitanians in the Conquest of England 1066–1100*, in: *ibid.* 9 (1987) p. 1–24.

10 BACHRACH, *The Military Administration of the Norman Conquest* (see n. 9) p. 21–23.

11 *Histoire* (see n. 8) p. 168. On the location see B. S. BACHRACH, *On the Origins of William the Conqueror's Horse Transports*, in: *Technology and Culture* 26 (1985) p. 512–513.

12 *Ibid.* p. 518, n. 2.



view that clerics – the overwhelming majority of early medieval narrative sources were written by either monks or priests – did not care to get the details right in military matters. Thus, for example, it has recently been shown that Ademar of Chabannes and Richer, two contemporaries of Fulk Nerra who wrote about the Angevin count, use precise and consistent terminology to identify various types of fortifications. Their technical vocabulary in these matters has been verified by the use of archaeological evidence. Instances of monkish chroniclers discussing military strategy relating to the Angevin count's use of fortified communication routes, the relative merits of siege warfare, and the role of morale in the steadfastness of besieged garrisons can also be mentioned<sup>13</sup>.

These indications that at least some medieval chroniclers were concerned about accuracy in military matters, in a way not inconsistent with writers of the classical world and especially in the later Roman empire, has stimulated work on the role played by Vegetius' »De Re Militari« in the early Middle Ages<sup>14</sup>. Closely correlated with the recognition of Vegetius' importance, not only to writers but also to military commanders in pre-Crusade Europe, was the emergence of the view that much more of the institutional structure of the later Roman empire survived during the early Middle Ages than scholars prior to World War II commonly believed. In consonance with these views on both the survival and the revival of Roman forms, based in part on archaeological evidence, scholars have begun to scale in an upward direction the size of early medieval armed forces<sup>15</sup>.

The careful evaluation of fortifications, some dating back to the Roman era, in close correlation with the composition of the »burghal hidage« has enabled specialists in Anglo-Saxon history to show that by the early tenth century, at the latest, Wessex had a highly complicated defensive system manned by in excess of 27000 garrison troops<sup>16</sup>. In a brilliant analysis of Carolingian military strength Karl Ferdinand Werner has shown that Charlemagne's empire could likely produce well in excess of 35000 well equipped mounted troops and perhaps 100000 foot soldiers. For the Avar campaign of 796 it is plausibly estimated that the number of Frankish horsemen alone was in the 15000 to 20000 range<sup>17</sup>.

As we approach the task of ascertaining the size of Fulk Nerra's field armies let us keep in mind the matters discussed above:

13 See B. S. BACHRACH, *Early Medieval Fortifications in the »West« of France: A Revised Technical Vocabulary*, in: *Technology and Culture* 16 (1975) p. 531–569; BACHRACH, *Fortifications and Military Tactics: Fulk Nerra's strongholds circa 1000* (see n. 1) p. 531–549; BACHRACH, *The Strategy of Angevin Castle Building* (see n. 1) p. 538–539.

14 BACHRACH, *The Practical Use of Vegetius' De Re Militari* (see n. 1) p. 239–255.

15 The trend is summarized by CONTAMINE, *War in The Middle Ages* (see n. 6) p. 25, 33–34.

16 Patrick WORMALD, *The Ninth Century*, in: *The Anglo Saxons*, ed. James CAMPBELL, Ithaca N. Y. 1982, p. 152–153.

17 Karl Ferdinand WERNER, *Heeresorganisation und Kriegsführung im deutschen Königreich des 10. und 11. Jahrhunderts*, in: *Settimane di Studio del Centro Italiano sull' alto Medioevo* (hereafter cited as SSCI) 15, Spoleto 1968, p. 791–843; followed by CONTAMINE, *War in the Middle Ages* (see n. 6) p. 25. But cf. B. S. BACHRACH, *Animals and Warfare in Early Medieval Europe*, SSCI 21, Spoleto, 1985, p. 727, 763, now reversed in BACHRACH, *The Military Administration of the Norman Conquest* (see n. 9), *passim* and esp. p. 24–25; WERNER's arguments have been accepted.



1. Some early medieval chroniclers cared about getting military details right.
2. Some early medieval chroniclers provided numbers of an order of magnitude that are undoubtedly accurate.
3. Some early medieval military forces were several orders of magnitude greater than previous scholars have believed.
4. The role of surviving and resuscitated institutions of the later Roman empire combined with the influence of Vegetius' »De Re Militari« requires that the use of »Roman« terminology not be dismissed *pro forma* as stylistic adornment of no evidential value but rather be carefully considered so as to ascertain the facts behind the words.
5. Archaeological evidence must be carefully examined in relation to the questions raised by numbers in both the narrative and the documentary sources.

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The chronicler Richer, who wrote at the end of the tenth century and was very well informed about Fulk Nerra's early military activities, reports the Angevin count's troop strength for offensive operations during the campaigning season of 990 against Count Odo I of Blois in the following manner: »He [Fulk] mustered 4000, not in order to engage in battle, his men were not numerous enough to oppose Odo's forces, but so that they might burn and ravage Odo's lands«<sup>18</sup>.

While Fulk's strategy for someone outnumbered by the enemy is certainly consistent with good military practice as advocated by the late Roman military writer Vegetius<sup>19</sup>, Robert Latouche, the editor of Richer's »Histoire«, has called into question the figure of 4000 effectives given for the Angevin count's army. The basis of Latouche's criticism is the fact that when Richer reports the size of the army which Charles of Lorraine mustered in 990 in order to oppose Hugh Capet the number is also given at 4000<sup>20</sup>. It seems to me that in this case Latouche is being excessively critical since *prima facie* there is no reason why two armies could not have been ostensibly the same size, i. e. of the same order of magnitude at least, and no evidence is offered to demonstrate that either number is inaccurate or inherently unreasonable.

In this context it is of considerable importance that Richer reports that Hugh Capet mustered an army of 6000 men against Charles. From a military perspective, if Charles of Lorraine were to provide even marginal opposition to the new king's army, a force of at least 4000 men would have been required to oppose an army of 6000 effectives. For Charles to have had a significantly smaller army, i. e. one that would be outnumbered by a ratio greater than 3:2, would have made credible opposition virtually impossible. In turn, a severely unbalanced situation would likely have resulted in mass desertions. As the situation evolved, however, the forces were sufficiently well matched that neither commander was eager to risk battle<sup>21</sup>.

18 Richer, *Histoire de France*, ed. and trans. Robert LATOUCHE, Paris 1937, Bk. IV, ch. 79.

19 BACHRACH, *The Practical Use of Vegetius' De Re Militari* (see n. 1) p. 247.

20 Richer, *Hist.* (see n. 18) p. 276, n. 2.

21 *Ibid.*, Bk. IV, chs. 37, 29. Cf. LATOUCHE's note p. 201, n. 1, where he follows Ferdinand LOT, *Etudes sur la règne de Hugues Capet et la fin du X<sup>e</sup> siècle*, Paris 1903, p. 27, n. 1. Lot, however, provides no analysis of the numbers mentioned by Richer.



Figures such as 4000 and 6000, exact to the zero, might seem just a bit too precise to be taken seriously. Indeed, even modern commanders of large units with the benefit of computer printouts are unlikely to have figures exact to the man when dealing with such large numbers. To have such exact numbers to the zero is even less plausible. Thus, as suggested above, it is likely that Richer is speaking in orders of magnitude not in terms of exact figures. It may be recalled here, as mentioned above, that Richer was one of Fulk's contemporaries who made an effort to and was successful in using precise and consistent terminology in his discussion of fortifications<sup>22</sup>. In light of this disposition it would perhaps not be overly naive to suggest provisionally that Richer was in fact endeavoring to convey to his readers the order of magnitude of the troops mustered by Hugh Capet, Fulk Nerra, and Charles of Lorraine from the respective regions that they dominated.

The situation, however, is even more nuanced than the reporting of figures in terms of order of magnitude. By the mid-tenth century in the area that once had constituted the *regnum Francorum* decimal based military organization was well established. This can be seen very clearly, for example, in the »Indiculus loricatorum«, Otto II's muster role for heavily armed horsemen raised in Germany for operations in southern Italy during the campaigning season of 981<sup>23</sup>. Whether this decimal system survived through the later Roman empire and the germanic kingdoms, where the *centena* was the basic institutional unit of organization, or was reposed periodically and especially after the dissolution of the Carolingian empire is unlikely to be decided in a convincing manner for the *regnum Francorum* as a whole because of the sketchy nature of the evidence. Present research suggests that in some areas continuity is more likely than it is in other areas<sup>24</sup>.

In the present context what is of greater importance than continuity is the prevalence of the *legio*, a term used to denote in best case circumstances a unit of 1000 men. The term was employed accurately in this manner to describe the major units of Otto I's army in 955, and Richer uses it as well<sup>25</sup>. Thus what Richer likely is

22 See, above, note 13.

23 WERNER, Heeresorganisation (see n. 7) p. 824–828; and the observations of CONTAMINE, War in the Middle Ages (see n. 6) p. 37–38.

24 See B. S. BACHRACH, Merovingian Military Organization, 481–751, Minneapolis 1972, p. 25, 32, 34, 46, 71–72, 97, 108, 109, 124; ID., Animals and Warfare (see n. 17) p. 709–710; and concerning continuity of an institutional nature see ID., The Angevin Economy (see n. 1).

25 Widukindi Monachi Corbeiensis Rerum Gestarum Saxoniarum libri tres, 5th edit. eds. H.-E. LOHMANN and P. HIRSCH, MGH SRG, Hannover 1935, Bk. III, ch. 44; and Thietmar von Merseburg, Chronik, ed. W. TRILLMICH, Darmstadt 1957, Bk. II, ch. 9, Bk. VI, ch. 58, both make the very clear connection between the *legio* and 1000 men. Widukind, Bk. I, ch. 36; Bk. II, ch. 17; Bk. III, chs. 45, 46. Widukind took great care with numbers and so did Thietmar. DELBRÜCK, The Art of War (see n. 6) p. 116, conservatively puts the number of Otto I's effectives at the Lechfeld at from 7000 to 8000 men. Delbrück, who as noted above is noted for being conservative, thus accepts the base figure provided for Otto by Thietmar (loc. cit.): *Collegit undique secus octo tantum legiones*. Cf. Karl LEYSER, The Battle at the Lech, 955: A Study in Tenth-Century Warfare, in: History 50 (1965) p. 16–17, who rejects these figures as too high, refuses to equate the *legio* with 1000 men in any but very symbolic terms, goes against not only Delbrück but an entire corps of German scholars who have been even less conservative than Delbrück, misinterprets the *Indiculus loricatorum*, attacks Widukind's reliability even when the chronicler uses small numbers and concludes, »The strength of the legions we meet in the works of the two greatest Saxon historians of the Ottonian period remains uncertain; it varied, but must be counted in hundreds which rarely, if ever, reached the one thousand mark.« If Leyser is



reporting in speaking of Fulk's army in 990 is that the Angevin count had mustered four *legiones*, i. e. four thousands. Similarly, Charles and Hugh Capet mustered four and six *legiones*, respectively. Here continuity with the later Roman empire is highly doubtful, but the presence of Roman influence through works such as Vegetius' »De Re Militari« or directly from Byzantium in the reforming of the *legio* are likely. Indeed, both old literary sources and contemporary contacts with the Byzantines were likely at work in different localities at various times. Sorting these out, however, is beyond the scope of the present study<sup>26</sup>.

In the context of the *legio* as a 1000 man unit, it is likely of some significance that Fulk Nerra's *fidelis* Hugh, the castellan of Lusignan, took or was given the sobriquet »Chiliarchus«, i. e. commander of 1000 men, because he, in fact, commanded a *legio* at one time or another in his lengthy career. The same is likely true of another of Fulk's *fideles*, Aimery of Rancon, who is called *tribunus*, the traditional Latin term given in the Roman army to the commander of 1000 men. Sulpicius of Buzançais, a *fidelis* of Fulk the Good, Fulk Nerra's grandfather, is called »Mille Clipei«, i. e. 1000 shields, which would seem to be yet another reference to the commander of a *legio*<sup>27</sup>.

Sobriquets such as »Mille Clipei« and »Chiliarchus«, which on the one hand are very likely renderings of vernacular forms and on the other at least hint at the decimal base of the military organization in which they participated, lend support to the view that when Richer was describing Fulk's army in terms of »thousands« his readers were intended to understand that the Angevin count mustered four *legiones*. The use of classical terminology by Fulk's contemporary, Letaldus of Micy, who described the Angevin count's army of *equites* and *pedites* with the term *phalanges*, should not be dismissed as mere stylistic anachronism<sup>28</sup>. All of this terminology, whether found in narrative sources or in documents, is fundamentally consonant with Fulk Nerra's knowledge of Vegetian ideas and his practical employment of these late Roman military concepts in both his tactical and strategic planning<sup>29</sup>.

The adoption of late Roman military terminology and the utilization of Vegetian ideas are not in themselves proof that Fulk's »thousands« or *legiones* were at full strength or even close to it and, indeed, the evidence falls short of demonstrating that the Angevin units were intended to measure up to their late Roman namesakes. Specialists in military history will surely note that the *legiones* of the late Republic

suggesting after all of his naysaying that the *legio* was rarely at full strength he may be correct. But if he is arguing that a *legio* was not intended at full strength to have 1000 men then he surely is incorrect. For the use of the term *legio* by Richer see Hist. (see n. 18) Bk. IV, ch. 38.

26 BACHRACH, Horse Transports (see n. 11) p. 513–517, 525–531, deals with some of these problems in regard to Fulk Nerra's later contemporary William the Conqueror.

27 The information concerning both Hugh and Aimery is to be found in *Conventum inter Guillelmum Aquitanorum comes et Hugonem Chiliarchum*, ed. Jane MARTINDALE, in: *The English Historical Review* 84 (1969) p. 541 and 543, respectively for their sobriquets and p. 546 for their relations with Fulk as his *fideles*. Also concerning this document see George BEECH, *A Feudal Document of Early Eleventh Century Poitou*, in: *Mélanges offerts à René Crozet*, Société des Etudes médiévales, Poitiers 1966, I, p. 203–213. For Sulpicius see *Gesta Ambaziensium Dominorum*, p. 87 (in CCA, see n. 5); and BACHRACH, *Geoffrey Grey mantle* (see n. 1) p. 45, n. 23, for the family.

28 *Miracula S. Eusicii*, 6, ed. Philippe LABBE, *Novae bibliothecae manuscriptorum ...*, Paris 1683, II, 465. Concerning Letaldus' detailed knowledge of Angevin affairs as demonstrated in other of his works see BACHRACH, *The Angevin Economy* (see n. 1) p. 52, n. 164.

29 BACHRACH, *The Practical Use of Vegetius' De Re Militari* (see n. 1) p. 245–255.



and of the early empire were 6000 man units at full strength and excluding auxiliaries while the *legiones* of the late empire, as mentioned above, were intended to be 1000 man units at full strength and there is little reason to believe that they were attended by auxiliaries. Simply because the *legiones* of Otto the Great, a contemporary of Geoffrey Grey mantle, Fulk's father, were 1000 man units does not prove that the Angevins gave this term the same meaning. The sobrequets displayed by several *fideles* of the Angevin counts, which have been discussed above, are surely suggestive but hardly conclusive evidence.

Some additional support concerning numbers would seem to be provided by the description that is preserved of the forces commanded by Lisoius of Amboise at the battle of Nouy in 1044, only four years after Fulk Nerra's death. Some three decades earlier, Fulk had established Lisoius on the eastern frontier and had given him a broadly based command which stretched from Amboise on the Loire river to Loches forty kilometers to the south on the Indre. At Nouy, Lisoius is said to have commanded a force mustered from the region of Amboise (probably the territory of his entire command was meant) which consisted of »one hundred banners« comprised both of *equites* and *pedites*<sup>30</sup>. In light of the decimal form of organization used during this period and the prevalence of the *conroi*, usually comprised of ten men serving under a banner to mark its position and perhaps to provide signals, it seems likely that Lisoius is depicted here commanding a legion of approximately 1000 men<sup>31</sup>.

The order of magnitude of this figure is complemented by another report concerning forces under Lisoius' command. In this example which took place prior to the battle of Nouy while Geoffrey Martel, Fulk Nerra's son, was conducting a siege of Tours, Lisoius was dispatched with a force of 1700 men to block all of the roads leading to the besieged city. This force is reported to have been comprised of two hundred mounted troops (*milites*) and fifteen hundred foot soldiers (*pedites*)<sup>32</sup>. From a tactical perspective the ratio of foot soldiers to mounted troops, 15:2 is sound in light of the task to be performed. The *pedites* would be deployed along the various roads behind barricades from which they could impede an enemy advance with missile weapons. The *equites* in the meanwhile would be deployed, perhaps in groups of fifty men given the number of approaches to Tours, so as to take advantage of interior lines of communication and thus to be positioned to attack by surprise enemy forces engaged against the barricades.

Several additional numbers are reported concerning the battle of Nouy that are of the same order of magnitude as those already discussed. The author of the »Gesta Consulum«, who provided the figures for Lisoius' contingents examined above, states unhesitatingly that when Count Theobald of Blois was captured after fleeing with a troop of his men; »580 *milites*« surrendered with him<sup>33</sup>. Information of this

30 For background on Lisoius see BACHRACH, *Forma Fidelitatis* (see n. 1) p. 813–814; and for the Battle of Nouy see *Chronica de Gestis Consulum Andegavorum* (in CCA) p. 57.

31 CONTAMINE, *The Art of War* (see n. 6) p. 229, indicates that on occasion the terms *bannière* and *conroi* were used as synonyms. See also VERBRUGGEN, *The Art of War* (see n. 6) p. 75–76; and BACHRACH, *Horse Transports* (see n. 11) p. 517.

32 *Gesta Consulum* (see n. 30) p. 85.

33 *Ibid.* p. 57.



exact nature may well have survived as a result of a list, no longer extant, which recorded the knightly persons, i. e. *milites*, for whom ransom could be collected<sup>34</sup>.

By contrast, Fulk le Réchin, Geoffrey Martel's nephew who was raised at the Angevin court and was about four or five years of age when his uncle won the battle of Nouy, wrote »Theobald was captured and up to a thousand of his *equites* [were also taken]«<sup>35</sup>. The differences between these accounts are subtle but can be explained. The term *equites* is to be understood in a general sense to mean mounted troops while *milites* is meant in the technical sense of knights, i. e. members of the aristocracy<sup>36</sup>. In this context it is important to note that Fulk le Réchin is somewhat vague about the number he provides, »up to a thousand horsemen«, and this is consistent with a less intensive interest in mounted troops, in general, while the author of the »Gesta« is more exact because his focus is on ransomable knights. Finally, it is clear that the account in the »Gesta« deals only with those men who fled with the count and were captured with him while Fulk le Réchin is talking about all captured horsemen.

A third account of the important prisoners taken at Nouy is provided by Hugh of Fleury who gives the total number of *milites* captured as 760<sup>37</sup>. Here it seems we are dealing with yet another perspective. As we put the three accounts together it would appear that somewhere close to a total of 1000 mounted troops, *equites*, were captured at Nouy. Of these 1000 some 760 were *milites*, i. e. knights, and of the total 760 *milites* taken, 580 had accompanied Count Theobald when he fled and surrendered with him. Thus of the total 760 *milites* captured at Nouy only 180 were captured outside the forest of Braye where Theobald capitulated.

A thousand mounted prisoners taken at Nouy of whom three-fourths were *milites* seems consistent in order of magnitude with other numbers available concerning this battle, i. e. a thousand men raised from Anjou's eastern frontier and 1700 men dispatched to hold the roads around Tours. Important prisoners in large numbers are also consistent with the combat itself in which Count Theobald not only was thoroughly routed but also was trapped and forced to surrender with a large force as made clear above.

It may also be suggested that these figures are consonant with numbers provided concerning other conflicts between the Angevins and the Blésois. Richer reported, as discussed above, that with four thousand effectives, or perhaps more realistically, with four *legiones* that may not have all been at full strength, Fulk was not able to meet Count Odo I of Blois in open combat. When Fulk Nerra finally did meet the Blésois in open battle at the exceptionally bloody battle of Pontlevoy in 1016, a contemporary reported that the latter lost more than 3000 men. A later source, but one closer to Anjou, indicates that the dead and wounded on both sides reached

34 Concerning the ransom of important prisoners see Ademar de Chabannes, *Chronique*, Bk. III, ch. 53, ed. Jules CHAVANON, Paris 1897, HALPHEN, *Le comté* (see n. 1) p. 47–48, 58.

35 *Fragmentum Historiae Andegavensis* (see n. 5) p. 235.

36 A very useful treatment of this subject by my former student William DELEHANTY, *Milites in the Narrative Sources of England, 1135–1154*, Ph.D. dissertation, University of Minnesota 1975, has its focus on England but with a review of the literature covering the Continent.

37 HALPHEN, *Le comté* (see n. 1) p. 48, n. 2.



6000<sup>38</sup>. Whether this means actually some 6000 persons or perhaps more likely the ostensible destruction of six *legiones* is not clear. However, it should be emphasized that huge losses are consistent with the course of the battle which saw the Blésois mounted troops flee from the field while the great masses of foot soldiers are described as being cut down by the Angevin horsemen and their allies from Maine<sup>39</sup>.

Both the battle of Ponlevoy and the battle of Nouy were a second or later stage in campaigns which began with an Angevin siege of Tours that the counts of Blois, Odo II and Teobald III, respectively, tried to relieve. The Angevin forces, which have been discussed above as engaging the Blésois in 1016 and 1044, were only very strong detachments from and probably the major part of even larger field armies besieging Tours. These forces were likely heavily laden with siege equipment and numerically dominated by men prepared to fight on foot as is required, by and large, in operations against fortifications<sup>40</sup>.

The number of men required to establish an effective defence of fortifications such as those which were in place at Tours is conditioned both strategically and tactically by several variables. Among the most important of the variables are the size and quality of the defences and the number and quality of the defenders. With regards to the former the evidence is clear. There were two formidable fortifications at Tours, the *urbs* and the *castrum*, each adorned with elaborate towers and strengthened by internal defences. The *urbs*, which was constructed during the later Roman empire and was kept in good repair even through the period of the Viking invasions, had a defensive perimeter of approximately 1100 meters. Walls of this type, and Tours was not an exception, were typically about ten meters in height and three meters in width at the base with deep foundations or erected on bed rock in order to thwart sapping. Archaeologists have been able to identify at least twenty towers which strengthened the walls of the *urbs* and there were likely at least ten more. The present ratio of one tower approximately every fifty meters is considerably greater than the average for such fortifications of one tower for every thirty meters of wall<sup>41</sup>.

Unlike the *urbs* which was built by first-class Roman military architects before the end of the fourth century and which withstood numerous attacks during the early Middle Ages, the *castrum* was constructed early in the tenth century and was considerably less formidable than its neighboring stronghold less than 800 meters distant. The 920 meter perimeter wall of the *castrum*, however, was strengthened by towers that were spaced on average at forty meter intervals. In addition, the *castrum* sported an internal citadel. Nevertheless, the perimeter wall was neither as high nor as thick as at the *urbs*<sup>42</sup>. Yet, its »Roman« roots like those of the *legio*, discussed above, are obvious. An archaeologist who recently reviewed the characteristics of the

38 Ibid. p. 35, n. 2. Halphen, however, cites the wrong page for Thietmar, it should be 230 and not 135.

39 Gesta Consulum (see n. 30) p. 52.

40 Jim BRADBURY, Battles in England and Normandy, 1066–1154, in: Anglo-Norman Studies VI, ed. R. Allen BROWN, Woodbridge 1984, p. 1–12, observes that many important battles developed from sieges in Normandy and England after the Conquest. Clearly this is also true for Anjou during the first half of the eleventh century.

41 BACHRACH, Early Medieval Fortifications (see n. 13) p. 539–549.

42 Charles LELONG, L'Enceinte du Castrum Sancti Martini (Tours), in: Bulletin archéologique, Paris 1971, p. 43–56.



*castrum* observed that it had much in common with a »legionary camp«<sup>43</sup>. In light of other well documented neo-Roman influences at Tours early in the tenth century the possibility that the designers of the *castrum* used a Roman or perhaps a Byzantine model should not be ignored<sup>44</sup>.

In both 1016 and 1044, the fortifications at Tours were sufficiently well defended that they did not surrender merely upon the appearance of the Angevin armies, however formidable they may have appeared. Indeed, the forces in both strongholds appear to have been committed on both occasions to hold out until aid arrived to relieve the siege<sup>45</sup>. These decisions apparently were made despite the *lex deditiois*, the law of surrender, current during this period which placed defenders who were captured as the result of a siege (or the taking of a stronghold that resisted) at the mercy of the victors. By contrast, those who surrendered their strongholds without causing the besiegers losses were according to the *lex deditiois* to be well treated and usually were<sup>46</sup>. Finally, it should be added that both Fulk Nerra and Geoffrey Martel had fierce reputations for brutality which could undo the will even of those in strong positions while those who resisted suffered horribly<sup>47</sup>.

The behavior of the men defending Tours, both the *urbs* and the *castrum* in 1016 and 1044, as outlined above, suggests that they felt themselves to be in a strong position. This view would seem to have prevailed despite the fact that in both cases the Angevin forces were formidable. They were so strong, indeed, that only a part of the Angevin army at both Pontlevoy and Nouy were able to defeat a large enemy force in the open field decisively, inflict very heavy casualties, and take numerous prisoners. In short, it seems reasonable to suggest that the fortifications at Tours in these two cases were manned at least by a minimum complement of effectives as measured by the standards of the time.

The minimum standard from the later ninth through the later eleventh centuries as applied to fortifications which included those of later Roman design, such as the *urbs* at Tours, as well as strongholds of various types constructed during the early Middle Ages was one man for every 4.125 feet of wall to be defended. This was a minimum figure based upon the assumption that the enemy would have to storm the walls and that the defenses would be neither undermined nor breached. Were the attackers assumed to have had the effective capacity, in general, to sap or breach the walls then the ratio of defender to length of wall defended would have had to have been considerably narrowed. To take a fortification by storm is the most costly and least

43 Ibid. p. 43.

44 A useful example of neo-Roman influence during this period at Tours is the *floruit* of Odo of Cluny's father who is described as an expert in the Roman law. See K. F. WERNER, *Untersuchungen zur Frühzeit der französischen Fürstentümer (9.–10. Jahrhundert)*, in: *Die Welt als Geschichte* 18 (1958) p. 270, 275; and see B. S. BACHRACH, *Some Observations on the Origins of Countess Gerberga of the Angevins: an essay in the application of the Tellenbach-Werner Prosopographical Method*, in: *Medieval Prosopography* 7.2 (1986) p. 3–4 and n. 17, for the Angevin connection.

45 This seems to be a legitimate inference in light of the fact that they did not surrender immediately as discussed above.

46 BACHRACH, *The Angevin Strategy of Castle Building* (see n. 1) p. 539.

47 BACHRACH, *The Enforcement of Forma Fidelitatis* (see n. 1) p. 816 – 819.



efficient means and gives the greatest advantage to the defenders<sup>48</sup>. With these factors in mind, it may be estimated that the minimum size for the defense force of the 1100 meter perimeter wall of the *urbs* was about 900 effectives and about 725 effectives for the 920 meter perimeter wall of the *castrum*.

In short, the inhabitants formed a militia for the local defense which traditionally was strengthened by a force of professional fightingmen, *milites* or *equites* depending on the particular usage of the place, who are often seen in specific circumstances to garrison the *arx* or citadel within the perimeter walls. In addition to these garrison troops in many of the important cities and towns the important inhabitants such as the bishop or abbot had a military household. Finally, in such places where counts or viscounts dwelled these secular nobles also had military households<sup>49</sup>. If we attempt to bring all of these factors into consideration, the combined forces that can be estimated to have defended the *urbs* and *castrum* at Tours in both 1016 and 1044 should be put in excess of 2000. In addition to the more than 1600 militia mentioned above, the archbishop is known traditionally to have had a formidable military household during the period, there was also a viscount at Tours, and the military retainers of the canons of Saint Martin should not be undervalued<sup>50</sup>.

For the Angevin counts to have hoped to take a complex of fortifications which boasted a defensive force not of a minimum 2000 but only a skeleton force of 1500 with less than triple that figure would have been a prescription for defeat and perhaps even for disaster. The manpower demands for vallation and contravallation, the requirements for blocking the roads to Tours (as mentioned above, Geoffrey Martel is reported to have deployed 1700 men in this task alone), and the need for a favorable ratio of attacker to defender when actually storming the walls, all tend toward sustaining the common sense that a ratio of less than three besiegers to each defender was imprudent.

Indeed, the possibility of success was surely remote in a situation which saw the number of attackers equal to or even double the number of the defenders. Between 100 and 50 meters distance from the walls those men storming the defenses came under increasingly effective archery fire. Upon reaching the walls those who had survived the arrows and the spears, loosed at closer range, were pelted by stones and other debris as they tried to place and scale the thirty to thirty-five foot ladders they had so laboriously carried over the killing zone in front of the defences. Once at the ladder's top, the successful attackers, in order to obtain a solid perch from which to fight, had to overwhelm the defenders deployed at four foot intervals on the wall<sup>51</sup>. Indeed, such an assault was a terrifying undertaking which could only succeed if the attackers substantially outnumbered the defenders made more stubborn by the liabilities of the *lex deditiois*. In such circumstances the conclusion seems inescapa-

48 See B. S. BACHRACH, Observations sur l'importance de la population angevine au temps de Foulque Nerra, in: *Le rôle de l'Ouest dans la destinée des Robertiens et des premiers Capetiens*, ed. Olivier GUILLOT (forthcoming in 1990).

49 Ibid.

50 Steven FANNING, La lutte entre Hubert de Vendôme, Évêque d'Angers, et l'Archevêque de Tours in 1016, in: *Bulletin de la Société archéologique, scientifique, et littéraire du Vendômois* (1980) p. 31-33.

51 BACHRACH, La population (see n. 48).



ble that the Angevin armies in both 1016 and 1044 each numbered in the neighborhood of 4000 effectives and perhaps they were even as much as fifty percent larger. In 1016, for example, Fulk's forces were strengthened by a noteworthy contingent from Maine.

These estimates for the size of the Angevin field armies that operated in the Touraine in 1016 and 1044 are of the same order of magnitude as Fulk Nerra's four *legiones* reported by his contemporary Richer in 990. Similar impressions can also be gleaned from Fulk's operations at Nantes in 992 and at Tours in 997. Concerning the latter, it should be noted that the defensive situation at Tours was in physical terms the same as in 1016 and 1044 with the fortified *urbs* and the *castrum* of Saint Martin's dominating the military landscape. In 997, Fulk was supported by his cousin-in-law, Aldebert, who was count of both la Marche and Périgord. The latter's army appears to have been formidable in so far as it had defeated the forces of the duke of Aquitaine and captured Poitiers before moving north in order to unite with Fulk's army. The point to be emphasized concerning operations in 997 is that the combined army of the Angevin count and of Aldebert was so impressive to the defenders of both the *urbs* and the *castrum* that they thought it useless to resist. Thus they surrendered without a fight<sup>52</sup>. This may perhaps permit the inference that the Angevins and their allies were even more numerous in 997 than in both 1016 and 1044 because in the two latter cases the garrisons did resist as we have already seen.

Events at Nantes in 992 provide a similar impression concerning the order of magnitude of Fulk Nerra's army. Early in the spring, Fulk mustered a field army with the intention of taking the *urbs* of Nantes. This was a formidable fortified *civitas* that had been built during the later Roman empire. It had a perimeter wall that measured 1600 meters. These walls were strengthened with perhaps as many as thirty towers. There was also an internal citadel (*arx*) which dated from Roman times as well as a tower, »le Bouffay« which had been built by Count Conan<sup>53</sup>. The city walls were defended by a garrison of *custodes* drawn from the *urbani*. The *arx* was held by an elite troop of *milites*<sup>54</sup>. Using the basic figure of one defender for each 4.125 feet of wall, the minimal adequate ratio consistent with the technology of the period and the usages of the era, we can estimate that an urban militia was available to defend the perimeter wall of the *urbs* which was not less than 1000 able bodied men. This is a worst case estimate and the number was probably considerably larger<sup>55</sup>.

Shortly after Fulk arrived at Nantes with his army and following brief discussions with the defenders, the leaders of the urban militia agreed to surrender and give hostages<sup>56</sup>. This would seem to suggest that the defenders believed that Fulk's army could take the city by storm and thus they surrendered rather than suffer the consequences of defeat. Indeed, Fulk had commanded forces in two very recent

52 BACHRACH, *A Study of Feudal Politics* (see n. 1) p. 114–115; HALPHEN, *Le comté* (see n. 1) p. 29–30.

53 BACHRACH, *Early Medieval Fortifications* (see n. 13) p. 544.

54 Richer, *Hist.* (see n. 18) Bk. IV, chs. 81–82; and *La Chronique de Nantes*, ed. René MERLET, Paris 1896, ch. xliv.

55 BACHRACH, *La population* (see n. 48).

56 Richer, *Hist.* (see n. 18) Bk. IV, chs. 81–82.



victories, at Melun and at Châteaudun, respectively, where the defenders who resisted were very harshly treated<sup>57</sup>.

If in the tenth and eleventh centuries the ratio of at least three attackers to each defender was regarded as the norm so that a stronghold could be taken by storm, then Fulk's army which threatened Nantes in 992 should be estimated to have been no less than 3000 men. This is a worst case based upon a worst case estimate for the size of the urban militia at Nantes and both forces were likely 20 to 25% larger. Whether we estimate Fulk's forces at Nantes to have been a minimum 3000 or perhaps 25% larger they are of the same order of magnitude as reported by Richer and fully consistent with the estimates already discussed for the armies of the Angevin count during the first half of the eleventh century.

Some additional support may perhaps be mustered for these estimates and inferences from events that took place at Nantes during the ninth century. For example, in 843 a Viking force, which was reported to have come in a fleet of sixty-seven ships and may have numbered as many as 3400 effective fighting men, took Nantes. The population suffered greatly<sup>58</sup>. In the late tenth century Nantes was very likely more populous and prosperous than it had been a century and a half earlier. Thus it may be suggested that a force at least as large as that which took the city in 843 was required to take the city in 992.

Yet another index for calculating the size of Fulk Nerra's campaigning armies is provided by his garrisons. Fulk developed, perhaps on the basis of some work that had been done earlier by his father, a system in which the *caballarii* who were serving as the garrison troops in the strongholds of the Angevin state and its environs were mustered for the field army when a *bellum publicum* was announced. We are very well informed concerning this *consuetudo* for the stronghold of Montreuil-Bellay. There, for example, when it was necessary to carry out an *expeditio* against the men of Thouars across Anjou's southwestern frontier, Fulk Nerra issued a *submonitio* to the castellan who led his *caballarii* to the count's army. Fulk issued another *submonitio* to the *vicarius* of the nearby villa of Méron who then mustered the *homines* in his *vicaria*, led them to the stronghold of Montreuil-Bellay, and served as the garrison until the *castellan* returned with the *caballarii*<sup>59</sup>.

During the height of his reign, Fulk Nerra had under his control within the borders of the Angevin state, as outlined above, at least seventy strongholds<sup>60</sup>. Thus if we add up all of the *caballarii* who served to garrison these fortifications we can

57 LOT, *Etudes sur le règne de Hugues Capet* (see n. 21) p. 160–161, 160, n. 3, with regard to Melun; and *Gesta Consulum* (see n. 30) p. 47, for Châteaudun. See also HALPHEN, *Le comté* (see n. 1) p. 18–19, with a chronological nuance by BACHRACH, *The Angevin Strategy of Castle Building* (see n. 1) p. 541, n. 25.

58 HORST ZETTEL, *Das Bild der Normannen und der Normanneneinfälle in westfränkischen, ostfränkischen und angelsächsischen Quellen des 8. bis 11. Jahrhunderts*, Munich 1977, p. 230.

59 BACHRACH, *The Angevin Strategy of Castle Building* (see n. 1) p. 544, n. 35; and ID., *Military Administration of the Norman Conquest* (see n. 9) p. 3, 5.

60 There is no complete list of the strongholds that were under Fulk Nerra's control in the period from 987 to 1040. Very close to a complete list, however, can be compiled from the following works: HALPHEN, *Le comté* (see n. 1) *passim*; ID., *Étude sur l'authenticité du fragment de chronique attribué à Foulque le Rêchin*, in: *Bibliothèque de la Faculté des Lettres de Paris* 13 (1901) p. 7–48; GUILLOT, *Le comte* (see n. 1) I, esp. p. 796–819; BACHRACH, *The Angevin Strategy of Castle Building* (see n. 1) p. 533–560; ID., *Fortifications and Military Tactics* (see n. 1) p. 531–549.



ascertain the order of magnitude of the mounted troops available for Fulk's operations. There were, however, additional mounted fighting men available to the count who were not serving as garrison troops. These included the military household of the count himself and of other magnates, such as the bishop of Angers, who were not castellans<sup>61</sup>.

Unfortunately, no documents survive which provide complete lists of troops assigned to garrison duty at any of Fulk Nerra's strongholds. Thus it is necessary to estimate the size of the garrison from the dimensions of the fortifications which were defended. The ratio, used above, of one defender for each four feet of wall to be held would appear to be a useful standard and will be employed here.

Our information concerning the dimensions of Fulk's strongholds is hardly complete. Indeed, of the seventy mentioned above only 20% of the towers have been sufficiently well studied to provide the dimensions of their internal perimeter<sup>62</sup>. This, however, is enough to permit us to make some suggestive calculations concerning the size of the garrisons. Information concerning curtain walls and other »outer works« is not sufficient for statistical evaluation. Moreover, it is likely by analogy with the defense of an *urbs* that the professional soldiers, *caballarii*, garrisoning a *castrum* dismounted and were stationed in the tower while *homines* from the countryside defended the curtain wall<sup>63</sup>.

The sample of towers that has been studied provides a median for the internal perimeter of fifty meters (slightly more than 1650 feet). If we employ the ratio of one defender for each four feet of wall to be held, then, on average, Fulk's strongholds required a garrison of forty *caballarii* each. However, because of the rather small sample available, it may well be that our data represents too many of the larger and better built fortifications. Thus it is likely more prudent to reduce the estimated figure for garrison size by 25% and suggest that each stronghold, on average, had thirty rather than forty *caballarii*. At these averages, seventy strongholds would provide for Fulk a force of *caballarii* for *expeditio* in excess of 2000 men.

It should be reiterated that this total would not include the members of the count's military household nor those of the bishop of Angers and of the abbots or those of Fulk's *fideles* who were not castellans. For comparative purposes it might be noted that the bishop of Strasbourg had such a formidable military household that he was obligated to send 100 heavily armed mounted troops to Italy to serve in the army of the German king. A century earlier the abbot of Corvey had in excess of thirty heavily armed horsemen in his household<sup>64</sup>. These data are useful indicators of the order of magnitude of only elite troops in ecclesiastical households. There were likely less well armed horsemen too. From all sources the Angevin count may perhaps have had as many as 3000 mounted troops available for *expeditio*. However, it is unlikely, given Fulk Nerra's defense in depth strategy and limited objective offensives, that all such troops would be called up for a single

61 BACHRACH, *La population* (see n. 48).

62 André CHATELAIN, *Donjons romans des pays d'Ouest*, Paris 1973, chart on p. [70-73], provides a list that can be compared with the strongholds identified in the works cited above in note 60.

63 BACHRACH, *La population* (see n. 48).

64 CONTAMINE, *War in the Middle Ages* (see n. 6) p. 37.



campaign, e. g. *caballarii* stationed at Amboise probably would not be summoned for operations in the Mauges region.

A force of from 2000 to 3000 mounted effectives for *bellum publicum* was only a part of the Angevin field army. For many operations, and especially for sieges, men fighting on foot were even more important than those who were mounted. We can perhaps gain a sense, but surely no more, of the ratio between mounted and foot soldiers from the few figures provided in the sources. For example, in 1044, Geoffrey Martel, as noted above, dispatched a force of 1500 *pedites* and 200 *equites* to block the access routes to Tours. A few years later an Angevin force of 1000 men (a *legio*?) comprised of 700 *pedites* and 300 *equites* was deployed in and around the stronghold of Domfront in order to interdict an invasion force commanded by Duke William of Normandy. By way of comparison, it would seem that Duke William of Normandy mustered a force of some 14000 effectives for the invasion of England, admittedly a very special case, of which from two to three thousand were likely mounted troops<sup>65</sup>. Clearly, these cases are sufficient to hint only that a ratio in excess of two footmen to each horseman in field armies for major operations.

The sources examined here permit the suggestion that Fulk Nerra had available for *bellum publicum* by the end of his reign about 4000 to 6000 effectives at a minimum. Of these at least 2000 were equipped for mounted service. This order of magnitude is not inconsistent with the economic and demographic growth of the Angevin state during the previous century, the extensive building of stone fortifications which Fulk carried out, and his overall military and political success for more than fifty years against formidable adversaries. By ascertaining the order of magnitude of Fulk's field army it will be possible, in the future, to evaluate his military strategy and tactics in light of such important variables as logistics and topography in order to obtain a better idea of the Angevin art of warfare.

65 Geoffrey Martel's detachment is treated above. For the troops at Domfront see Guillaume de Poitiers, *Hist.* (see n. 8) p. 36 and 38, where a large force of reinforcements comprised of »equestres ac pedestres« were sent to Domfront. Concerning Duke William's effectives at Hastings see BACHRACH, *William the Conqueror's Horse Transports* (see n. 13) p. 505–506; *Id.*, *The Military Administration of the Norman Conquest* (see n. 9) p. 2–4.