

Motte-and-bailey castles of Europe

Some aspects concerning their origin and evolution

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The motte-and-bailey castle is a well-known phenomenon, both in castle literature and in the European landscape. From Southern France and Italy to Southern Sweden and from Ireland to Poland we find these artificial castle mounds and sometimes the remains of their superstructures. The builders of these, predominantly, early castles took the best advantage of the physical conditions of their domain, therefore the location can be lowland areas with ample water or dominating hillsides and natural promontories. In the French Alps we find the highest situated motte of Europe: Brandes at an altitude of 1840m on top of the Alpe d'Huez (Isère).¹ Recent archeological research has improved our understanding of the history of these castles. Still, some questions remain unanswered. This contribution tries to shed some light upon the morphology of early mottes and their origins by looking at some interesting sites in Western Europe and by sharing the knowledge now available concerning these earthworks and their configuration.

Introduction

Castle literature presents us in general with a clear image of the first mottes with their timber buildings from the eleventh century on; their surrounding ditches; the general change into stone constructions on top and the evolution into more complicated sites, together with the adaptation of their elaborate baileys. We also get an idea of their

¹ M. Colardelle and C. Mazard, 'Premiers resultants des recherches sur les "mottes" médiévales en Dauphiné et en Savoie', *Archéologie Médiévale*, IX (1979) 67, 83-85, 95; M-C. Bailly-Maitre, ed., *Brandes et les mines d'argent du Dauphiné au moyen-âge* (Charavines-Fontaine, 1994) 16-17 ; idem, 'Fortifications ou structures de contrôle? Les reliefs aménagés du massif de l'Oisans', *Château Gaillard*, XXII (2006) 21-24.

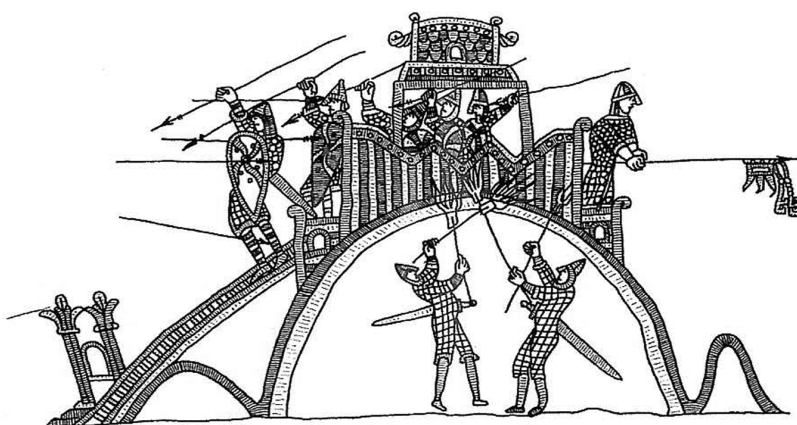
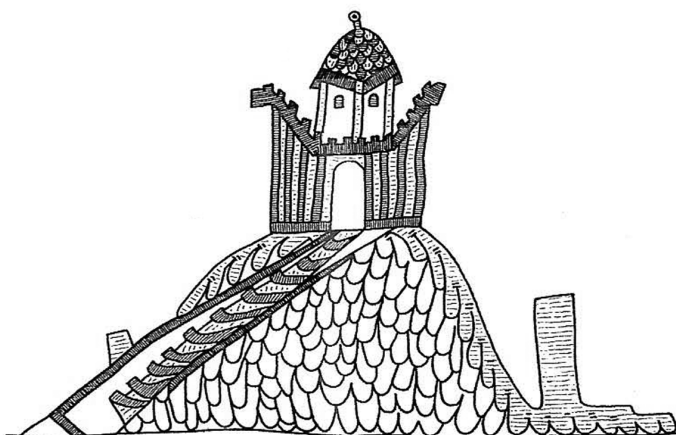
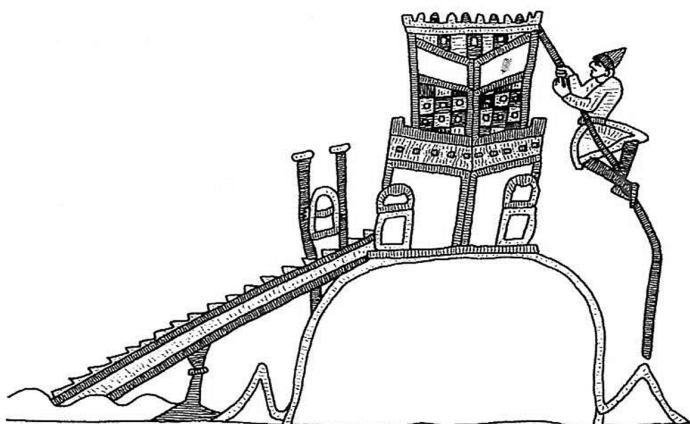


Fig. 1 Images of motte-castles on the Bayeux Tapestry (late eleventh century)

geographical distribution compared to other early castles such as ringworks (earthen ramparts in a circular or oval shape).²

For the first mottes, the Bayeux Tapestry (1070s) provides us with some images of their timber superstructures in a refined style as if they were Norwegian stave churches (Fig. 1).³

There is general agreement about the thirteenth century as the final period in motte-building for Western Europe and about a transition to the adaptation of the original site or to the choice for complete new castle types and locations.

Over the past (few) years, archaeology has taught us a lot about mottes; about their construction techniques and about the gradual heightening of some mottes as shown in a few cases. We got some insight in the variety of possibilities for timber or stone and brick constructions on top of the motte. Even the former buildings on the bailey are revealing their secrets nowadays.⁴

Still, there are some aspects of the motte-castle that need further attention. When Brian K. Davison strongly opposed the idea that the Normans introduced at once a fully developed motte-and-bailey castle into England, he made a strong point. He briefly examined the castles, both in Normandy and in England, thought to predate 1066, and pointed out the absence of real evidence for early mottes at most sites. In some doubtful cases he noticed 'atypical' features and the existence of some 'proto-type mottes' at the most.⁵

² Motte-and-bailey castles in general literature: G. Fournier, *Le château dans la France médiévale. Essai de sociologie monumentale* (Paris, 1978) 65-80; H. Hinz, *Motte und Donjon. Zur Frühgeschichte der mittelalterlichen Adelsburg* (Köln, 1981); 'Les fortifications de terre en Europe occidentale du Xe au XIIe siècles', *Archéologie Médiévale*, XI (1981); M. de Boüard and J. Decaëns, 'Les châteaux de terre et de charpente', in: J.P. Babelon, ed., *Le Château en France* (Paris, 1988) 15-24; J.R. Kenyon, *Medieval Fortifications* (Leicester-London, 1991) 3-23; J. Mesqui, *Châteaux et enceintes de la France médiévale. De la défense à la résidence* (2 dln.; Paris, 1991-1993), I, 16-31; H.L. Janssen, 'Tussen woning en versterking. Het kasteel in de Middeleeuwen', in: idem, e.a., *1000 jaar kastelen in Nederland* (Utrecht, 1996) 37-45; J. Mesqui, *Châteaux forts et fortifications en France* (Paris, 1997) 108-109; M. Bur, *Le Château* (Turnhout, 1999) 30-43; J. de Meulemeester and A. Matthys, 'De militaire architectuur', in: L. Deléhouzée, e.a., *Romaanse architectuur in België* (Tielt, 2000) 172-181; M. Colardelle and E. Verdel, 'Vie de château. La vie quotidienne dans les fortifications de terre et de bois du XIe siècle', in: *La vie dans le donjon au Moyen Âge* (Vendôme, 2005); F. Perreau and G. Lefranc, *Mottes castrales et sites fortifiés médiévaux du Pas-de-Calais* (Arras, 2005) 7-52.

³ Hinz, *Motte und Donjon*, 36-38; R. Higham and Barker, *Timber Castles* (London, 1992) 147-156; Perreau and Lefranc, *Mottes castrales et sites fortifiés médiévaux*, 13-22. And there is the well-known description (circa 1200) of the elaborate timber house (*domus lignea*) upon the motte of Ardres (circa 1120) by Lambert of Ardres (Fournier, *Le château dans la France médiévale*, 286-292; Higham and Barker, *Timber Castles*, 115-117).

⁴ See e.g.: J. le Maho, *La motte seigneuriale de Mirville (XIe-XIIe s.)* (Rouen, 1984); E. Louis, *Recherches sur le château à motte de Hordain (Nord)* (Douai, 1989); Kenyon, *Medieval Fortifications*, 9-23, 28-57; Higham and Barker, *Timber Castles*, 264-325; M. van Strydonck and C. Vanthournout, 'Dating the "Hoge Andjoen" motte at Werken (Prov. W. Fl.)', *Acta Archaeologica Lovaniensia. Monographiae*, VIII (1995) 441-452; R. Friedrich and K-F. Rittershofer, 'Die hochmittelalterliche Motte und Niederungsburg von Oberursel-Bommersheim, Hochtaunuskreis – Ausgrabungen 1988-1993', *Château Gaillard*, XVII (1996) 93-110; Janssen, 'Tussen woning en versterking', 37-45; J. de Meulemeester, 'Le château à motte comme chantier: quelques données et réflexions des anciens Pays-Bas méridionaux', *Château Gaillard*, XVIII (1998) 37-44; E. Compagnon and E. Louis, ed., *Ecaillon et Estrées. Deux mottes féodales du Douaisis (Nord)* (Douai, 1999); De Meulemeester and Matthys, 'De militaire architectuur', 172-181; A-M. Flambard Héricher, 'Fonctions et repartition de l'espace dans la basse-cour d'une fortification de frontière: Bretoncelles (Orne), XIe-XVe siècle', *Château Gaillard*, XXI (2004) 79-97; R.A. Higham, 'The development of a timber castle at Hen Domen, Montgomery (Powys, Wales), c. 1070-1270', idem, 113-117; A. Renoux, 'Les mutations morphologiques et fonctionnelles de la basse-cour du château des comtes de Champagne à Montfélix (Xe-XIIIe siècle)', *Château Gaillard*, XXI (2004) 259-270.

⁵ B.K. Davison, 'Early earthwork castles: a new model', *Château Gaillard*, III (1969) 37-47.

Yet, Davison too based his conclusion on the still widespread idea that a motte-castle had to be a 'classical' one. That's to say, preferably with an eight-shaped ground plan related to a separated bailey and with a wet or dry ditch. Of course, our knowledge of early mottes was still limited in the 60s, but that presupposition prevents, even today⁶, getting real insight into the evolution of early mottes and the acceptance of their multiform appearances.

The 'evolution-factor' has been given some thought during the last decades⁷, but still deserves more attention. This paper tries to shed some light upon the morphology of early mottes and their origins by looking at some interesting sites in Western Europe and by sharing the knowledge now available concerning these earthworks and their configuration.

'Atypical' mottes

The question raised by B.K. Davison (and the 'definition' problem he caused at the same time) is best illustrated by the example of the castle site of La Ferté-en-Bray (Seine-Maritime). It was mentioned as *castrum* about 1040, but there have been no excavations so far to prove this date. Nevertheless, the features of this motte are quite contrary to the so-called 'classical' one traditional literature is presenting us. Here we find an almost natural shaped motte, cut off by man from the promontory on which the bailey is situated, but with no surrounding ditch around its base:⁸ 'atypical' so to speak.

In Leyden (the Netherlands) we have the famous twelfth century shellkeep of tufa, based upon a much older and lower motte, hidden in the present one and dating from around the year 1000 (circa 6.5 m h.).⁹ The motte of Leyden was protected by the junction of two branches of the river Rhine and the former *Burchtgracht* (moat) at the landside. There is no 'classical' ditch around the base of the motte (Fig. 2). There may have been good reasons for its omission (the presence of the river, for instance), but

⁶ See the 'reconstruction' of a motte (supposed to be from circa 1000) at St. Sylvain-d'Anjou (D. Barz, 'Rekonstruktion einer Motte in Saint Sylvain d'Anjou (Maine-et-Loire, Frankreich)', in: H. Hofrichter, ed., *Holz in der Burgenarchitektur* (Braubach, 2004) 215-216.

⁷ G. Fournier, 'Vestiges de mottes castrales en Basse Auvergne', *Revue d'Auvergne*, LXXV (1961) 163-164; P. Héliot, 'Les châteaux-forts en France du Xe au XIIe siècle à la lumière de travaux récents', *Journal des Savants* (1965) 492-495; M. de Boüard, 'La motte', in: *L'archéologie du village médiéval* (Leuven-Gent, 1967) 35-55; M. Bur, e.a., *Vestiges d'habitat seigneurial fortifié du Bas-Pays Argonnais* (Reims, 1975) 3-14; M. Bur, 'Essai de typologie de l'habitat seigneurial dans l'Argonne aux XIe - XIIIe siècles d'après des vestiges relevés sur le terrain', in: *La Construction au Moyen Age (Congrès Besançon 1972)*, Les Belles Lettres (1973) 158-159, 163-166; Fournier, *Le château dans la France médiévale*, 65-79; M. Bur, 'Les châteaux de la haute vallée de la Meuse au Moyen Age', *Annales de l'Est*, I (1979) 12, 14; M. Bur, e.a., *Vestiges d'habitat seigneurial fortifié des Ardennes et de la vallée de l'Aisne* (Reims, 1980) 8-17; F. Enaud, 'Enceintes de terre et châteaux à motte en France', *IBI Bulletin*, XLIII (1985) 32-46; M. Bur, 'Le château', in: X. Barral i Altet, ed., *Le paysage monumental de la France autour de l'an Mil* (Paris, 1987) 73-81; De Boüard and Decaëns, 'Les châteaux de terre et de charpente', 18-19; D.J. Cathcart King, *The Castle in England and Wales. An interpretative history* (London-New York, 1991) 32-41; D. Mouton, 'Allemagne-en-Provence (Alpes-de-Haute-Provence). La Mouitte', *Archéologie Médiévale*, XXXVI (2006) 297 (at the search for the type of motte 'de première génération' in the Provence circa 1000).

⁸ M. de Boüard, 'Quelques données françaises et normandes concernant le problème de l'origine des mottes', *Château Gaillard*, II (1967) 24; Davison, 'Early earthwork castles', 41-42; P. Toussaint, 'Fortifications normandes de la vallée de l'Epte. Approche typologique', *Les Riches Heures de Gisors (Société Historique et Géographique du Bassin de l'Epte, Cahiers)*, XL (1997) 34.

⁹ Janssen, 'Tussen woning en versterking', 42; M. Dolmans 'De Burcht van Leiden', in: J. Stöver, e.a., ed., *Kastelen en buitenplaatsen in Zuid-Holland* (Zutphen, 2000) 136-141; H. van den Ende, 'De Burcht', in: H. van den Ende, e.a., ed., *Dwars door de stad. Archeologische en bouwhistorische ontdekkingen in Leiden* (Leiden, 2007) 25-31.

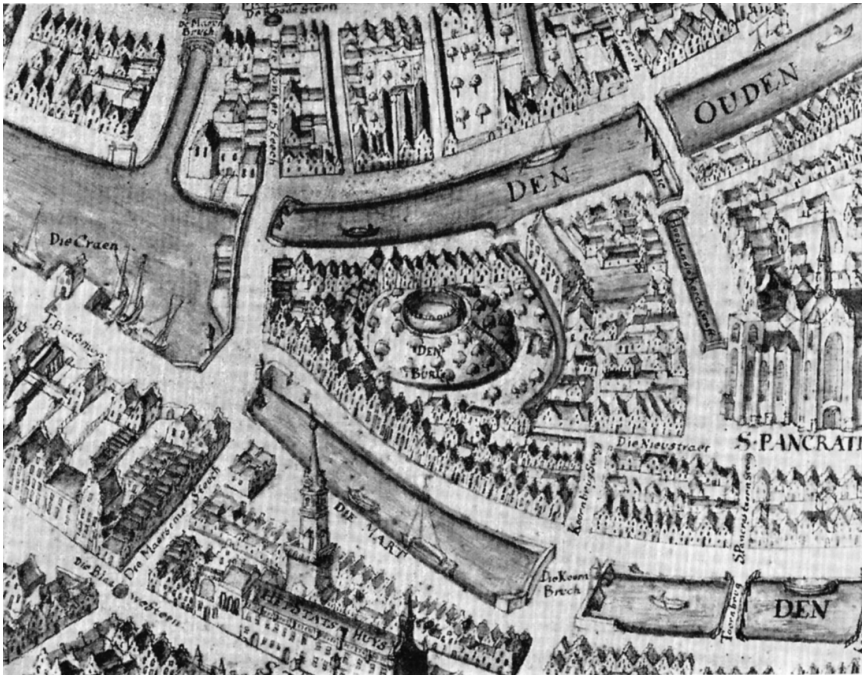


Fig. 2 The motte of Leyden (NL) at the tip of two branches of the Rhine in the sixteenth century, copy 1744 (*Gem. Leiden, Monumenten en Archeologie*, 22/59)

linked to the early date it is worth noticing. Towards the man-made *Burchtgracht* there is a kind of raised platform at the foot of the motte or maybe this contains the remnants of a rampart alongside the moat to cut off the peninsula.

In the east of the Netherlands, we find the largest motte of the country, which is about 12 to 20 m high: Montferland near 's-Heerenberg (Fig. 3). A recent re-interpretation of an old excavation by J.G.N. Renaud makes it quite possible to see in Montferland the famous fortress *Opladen* (*Upladium*) of the notorious couple Balderik and Adela from around 1000 AD. Here, the top 7 m were added to a natural hill, so we may speak of a real motte. According to the archaeological results, this is a very early example from the late tenth or early eleventh century. By that time, the vast platform (90 x 60 m) accommodated a timber hall (14 x 5.5 m) and (at least the lower part of) an enormous tower in tufa of 16 by 16 m and with 5 m thick walls. These buildings were surrounded by a curtain wall in stone, set in a low rampart. So, the impression is given of a ringwork castle set on an artificially elevated hill. The complex is surrounded by a dry ditch and double outer banks. Furthermore, there are the remains of a bailey.¹⁰ The

¹⁰ P.A.C. Schut, 'De Montferlandsche berg, het sieraad der tusschen IJssel en Rijn gelegene landen'. *De motte Montferland (gemeente Bergh) en een overzicht van motteversterkingen in Gelderland*, Nederlandse Archeologische Rapporten, XXIV (Amersfoort, 2003) 15-43, 50-51; P. Schut, 'Oud onderzoek opnieuw bekeken: vroege versterkingen in Gelderland', in: *De vroege burchten. Neerslag van een symposium (Boxmeer 26 maart 2006) (Het Brabants Kasteel, XXVIII)* (will be published 2008).



Fig. 3 The impressive motte of Montferland (NL) (Photo author 2000)

contemporary chronicler Alpertus Mettensis characterizes the nature of the fortification as ‘et aggere egregie elevatus’ (‘fortified by heightening in an excellent manner’). He also tells us about the destruction of *Opladen* in late 1016 and of the demolition of its curtain wall, which was a unique feature in those days and in this region, he says.¹¹

So, with Montferland we have a very early motte, even considering the whole of Europe, but we also have the suggestion of a kind of experiment with new insights in castle building: the ringwork on top of a strongly raised platform and a bailey or barbican at its foot. The archaeological re-interpretation of Montferland and the contemporary account by Alpertus Mettensis (circa 1022) help us to get better informed about some other sites that played a role in the actions of count Balderik around the year 1000. Consequently the ‘agger’ added to the existing hillfort of *Munna* (Monterberg) near Kalkar (Germany) makes a good chance to live on in the huge motte in the centre of that fortification. And quite possibly the fine motte in a blind branch of the river Rhine at Aspel (Rees, Germany) is referred to as the ‘castellum Aspola’ in the lake and had a multitude of ‘towers’.¹² Furthermore there is the well-

¹¹ H. van Rij, e.a., ed., *Alpertus van Metz. Gebeurtenissen van deze tijd & Een fragment over bisschop Diederik I van Metz. De diversitate temporum & Fragmentum de Deoderico primo episcopi Mettensi* (Amsterdam, 1980) 70; B. Aarts, ‘Early castles of the Meuse-Rhine Border Region and Some Parallels in Western Europe c. 1000: a Comparative Approach’, *Château Gaillard*, XVII (1996) 11-23, 16; B. Aarts, ‘Montferland’ en de consequenties. De vroege burchten bij Alpertus van Metz’, in: *Middeleeuwse Kastelen in Veelvoud. Nieuwe Studies over Verduwenen Objecten* (forthcoming).

¹² Aarts, ‘Early castles of the Meuse-Rhine Border Region’, 13, 16; idem, ‘Montferland’ en de consequenties’.



Fig. 4 *Motte barrage* of Mergelpe (Ubbergen, NL) with linked-up bailey rampart in front (Photo author 1979)

known description by Alpertus of a hillock in a marshy lake close to the river Meuse, its heightening and strengthening with a palisade ('vallum') and 'towers' on top. For a possible location we have good grounds to think of the castle site of Boxmeer upon the Meuse.¹³

Near Nijmegen we come across *Mergelpe* (Duivelsberg) on the moraine heights. Here, a large motte is connected to a small bailey by its ramparts (Fig. 4). At a short distance there is a second motte, protected at the front by a dry ditch and an outer bank. It overlooks the river valley and the former abbey of Zyfflich below, which was founded by count Balderik around 1002. This second motte is complementary to the large one that just blocks the approach from the moraine plateau as a 'motte barrage'. The large one, with its immediately linked-up bailey, without any separation between them, offers a unique specimen for the Netherlands.¹⁴ To understand such a layout, one has to look abroad to search for parallels among other early motte castles in Western Europe.

¹³ 'Quo explorato extimplo coegit magnam multitudinem armatorum et rusticis undique evocates et fossa in circuitu facta editorem admodum fecit. Quem vallo circumdedit et turribus excitatis munitionem satis firmam perfecit' (Alpertus Mettensis, circa 1022): Van Rij, e.a., ed., *Alpertus van Metz*, 42-46; B. Aarts, 'Onbekend Boxmeer, oud tot zeer oud?', *Het Brabants Kasteel*, XVI (1993) 20-30; Aarts, 'Early castles of the Meuse-Rhine Border Region', 13; B. Aarts, 'De vroege burchten bij Alpertus van Metz, in relatie tot het Kasteel van Boxmeer', in: *De vroege burchten*.

¹⁴ Janssen, 'Tussen woning en versterking', 38; Aarts, 'Early castles of the Meuse-Rhine Border Region', 16-17; Schut, 'De Montferlandsche berg', 69-70; Schut, 'Oud onderzoek opnieuw bekeken'.

The 'motte barrage'

In a limited survey of such 'atypical' mottes the example of Beaurain-Château is quite interesting (Pas-de-Calais, in Ponthieu to the North of Normandy). Here, a large motte smoothly connects to the ramparts of a bailey without any special separation between them. There is no ditch at the interior, just an outer ditch to cut off the complex from the edge it is situated upon. This Beaurain is the *Belrem*, mentioned and depicted¹⁵ on the Bayeux Tapestry.

Also on this Tapestry is the well-known image of 'Hastings castle', represented as a motte with a timber construction on top. Although there is no hard archaeological evidence to prove the original motte, buried in the present one at Hastings Castle high upon the cliff, is the Conqueror's one in 1066¹⁶, it is important here too to notice the position of this motte as an integral part of the castle rampart. And therefore, in comparison with Beaurain and *Mergelpe*, the 'archaic' plan may be a clue for its identification.

The beautiful outlined earthwork *Butte du château* at Bretoncelles (Orne) consists of a motte and two baileys, of which the inner bailey is connected directly to the motte by its ramparts. The layout of this castle from the second half of the eleventh century is still considered in French literature as somewhat 'odd' ('motte et basse-cour emboîtée')¹⁷, not as a typical example of the morphology of early mottes.

The consensus is that the Normans introduced 'the' motte-and-bailey castle in England. However, even before 1066 there were castles of this type in Britain, but only a few and they have to be 'discovered', as they too do not correspond to the so-called 'classical' types of later periods. One of those early motte-and-bailey castles is Ewyas Harold at the border with Wales (*castel* 1051-1052). Of course, I'm fully aware of the dangers involved in suggesting anything about castle plans and dates without the archaeological facts of a real excavation, but I like to show some patterns in the configuration of early earthwork castles and how they contribute to our understanding of the evolution of motte castles in Europe.

English castellology has always had some difficulties in understanding the morphology of the pre-1066 castle of Ewyas Harold by lack of comparable examples in England. In fact we are looking here at a continental phenomenon of the early eleventh century and even of the late tenth century: the 'motte barrage' opposite the hillside; with a small bank to protect the entrance to a bailey behind the motte at the tip of the spur (Fig. 5).¹⁸ Like *Belrem* and *Mergelpe*, but without the complete circumvallation of the bailey.

¹⁵ A.J. Taylor 'Belrem', in: M. Chibnall, ed., *Anglo-Norman Studies XIV. Proceedings of the Battle Conference 1991* (Woodbridge, 1992) 1-23; Aarts, 'Early castles of the Meuse-Rhine Border Region', 21 n. 68. The picture of the *motte*-castle of *Belrem* is traditionally attributed to the ducal palace of Rouen. See also: Perreau and Lefranc, *Mottes castrales et sites fortifiés médiévaux*, 85-87 (without using Taylor, 'Belrem', unfortunately).

¹⁶ P.A. Barker and K.J. Barton, 'Excavations at Hastings Castle, 1968', in: *Five Castle Excavations. Reports on the Institute's Research Project into the Origins of the Castle in England* (Leicester, 1978) 83-90; Kenyon, *Medieval Fortifications*, 10-11; Higham and Barker, *Timber Castles*, 156; Taylor, 'Belrem', 19-20.

¹⁷ Flambard Héricher, 'Fonctions et repartition de l'espace', 81.

¹⁸ See: Higham and Barker, *Timber Castles*, 43, 45; Taylor, 'Belrem', 14-16; Aarts, 'Early castles of the Meuse-Rhine Border Region', 21 n. 63; R. Shoesmith, *A Guide to Castles and Moated Sites in Herefordshire* (Little Logaston Wootton Almeley, 1996) 104-106. Interesting also to compare with the first castle of Wigmore (Shoesmith, *A Guide to Castles and Moated Sites*, 24, 229, 239-240).

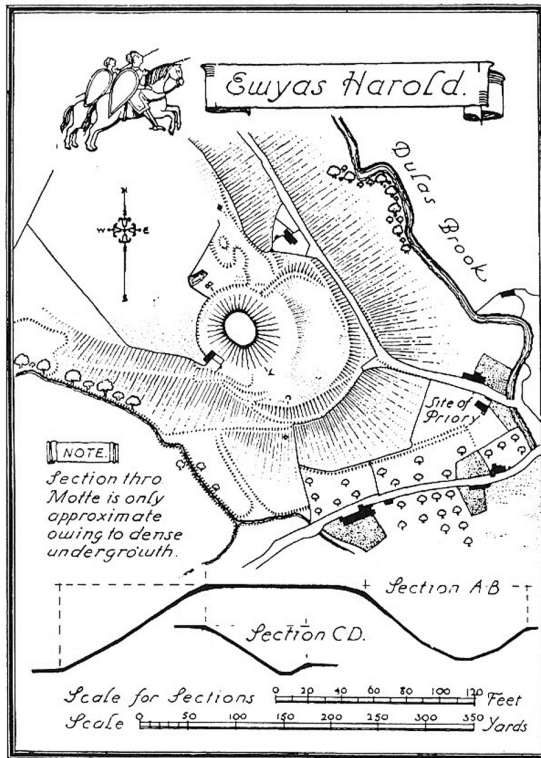


Fig. 5 Ewyas Harold (UK), *motte barrage* with bailey at the tip of the spur

In my view, the same design is present at pre-Norman Earls Barton, where the motte behind the ditch is stretched out into a kidney shape, owing to the position of the Anglo-Saxon church tower in the bailey.¹⁹

This type of 'motte barrage' with a non-separated bailey at its backside occurred apparently quite frequently in the region of Champagne-Ardenne-Lorraine, where a lot of them are to be found.

There is Brixey in the Meuse valley of Lorraine with a small motte with the remains of a stone tower, blocking the entrance to a small spur as its bailey. The castle is mentioned in 1005, but, of course, one still has to prove all the elements are that old.²⁰ Vienne-le-Château in Champagne-Marne shows the same plan: a small platform for a bailey lies behind a large motte that blocks the approach (Fig. 6).²¹

Bourcq in Champagne-Ardenne shows some variation on the theme. The narrow castle platform is cut off from the plateau of the village settlement by bank and ditch, but has its impressive motte right in the middle as a partition element. There are no ditch-

¹⁹ Higham and Barker, *Timber Castles*, 50; D. Parsons, 'The historical context of the tower (All Saints' Church, Earls Barton)', *The Archaeological Journal*, CLII (1995) 87-91; Aarts, 'Early castles of the Meuse-Rhine Border Region', 21 n. 63.

²⁰ Bur, 'Les châteaux', 12-14.

²¹ Bur, e.a., *Vestiges*, I, 112-114; M. Bur, 'Essai de typologie de l'habitat seigneurial', 153-154.



Fig. 6 Vienne-le-Château (F), *motte barrage*, seen from the bailey at its backside
(Photo author 2000)

es around its base. This earthwork castle was the home of Baldwin of Bourcq in the eleventh century, who became the second king of Jerusalem.²²

Outside the ancient border area and war zone of Champagne-Lorraine between France and the Holy Roman Empire, we find also some specimens of this apparently early type of 'motte-adossée-à-basse-cour'. There is the ancestral home of the counts of Berg in the Rhineland, *Altenberg* near Cologne. It dates from the eleventh century and was abandoned in 1133. German castellology still finds it hard to categorize this rare phenomenon in their country, which consists of a small platform bailey and an 'Erdsöckel' at the front side²³ (the *mons* of the lord of 'Berg'!).

²² Bur, e.a., *Vestiges*, II, 27-28. Baldwin of Bourcq (mentioned 1096-1131) was the son of the count of Rethel, where we too find a beautiful 'motte barrage' (21m high) with linked-up bailey (Bur, e.a., *Vestiges*, II, 109-113). Other examples of this type of motte-castle in the region are Autry (Bur, e.a., *Vestiges*, I); Le Châtelet-sur-Retourne, Le Mont-de-Beauvois, Rozoy-sur-Serre, Stonne (Bur, e.a., *Vestiges*, II); Montigny-Lagesse, Montmorency-Beaufort (M. Bur, e.a., *Vestiges d'habitat seigneurial fortifié en Champagne méridionale* (Reims, 1997).

²³ H. Becker, 'Beiträge zur Geographie der mittelalterlichen Kulturlandschaft im Raum Altenberg', in: M. Untermann, e.a., ed., *Die Grabungen auf der Burg Berge (Mons) – Altenberg (Gem. Odenthal, Rheinisch-Bergischer Kreis)* (Köln, 1984) 94 (Bemerkenswert und nicht ohne weiteres einzuordnen ist der künstlich aufgeschüttete Sockel) 97 ('und wahrscheinlich zu seiner Zeit ein Experiment'; R. Friedrich, 'Salierzeitliche Burganlagen im nördlichen Rheinland', in: H.W. Böhme, ed., *Burgen der Salierzeit* (2 dln.; Sigmaringen, 1991), I, 192 ('experimentartiger Einzelfall'); R. Friedrich, 'Zum Forschungsstand und Verbreitungsbild der Motten im nördlichen Rheinland', in: P. von Ettel, e.a., ed., *Interdisziplinäre Beiträge zur Siedlungsarchäologie. Gedenkschrift Walter Janssen* (Rahden, 2002) 106 ('einen mottenähnlichen Hauptburghügel'); H.W. Böhme, 'Burgen der Salierzeit. Von den Anfängen adligen Burgenbaus bis ins 11./12. Jahrhundert', in: J. Jarnut and M. Wemhoff, ed., *Vom Umbruch zur Erneuerung? Das 11. und beginnende 12. Jahrhundert – Positionen der Forschung* (München, 2006) 388 n. 37 ('einem künstlich aufgeschütteten, ummauerten Erdsöckel, der an das Bauprinzip der Motten erinnert').

The 'concept' of such an 'interlocked' motte-and-bailey ('motte et basse-cour emboîtée') dates back to the tenth century, no doubt. Montaigu near Laon in Northern France is a good candidate for the oldest specimen of this kind. The rock-cut complex here of a tightly connected motte-and-bailey situated on top of a conical hill may be the 'castrum Mons Acutus', defended by the count of Blois-Chartres and besieged by the king of France in 948.²⁴

Interesting variations too can be noticed elsewhere, such as the addition of one or more baileys in front of the motte (and ditch).²⁵ Future research has to decide if the relative small platform bailey at the back of the motte contains the residential area in these examples (in contrast with the larger bailey(s) in front of the motte), in a way it was proven for the timber castle of Grimbosq (Calvados) with its motte in the midst of two separated baileys, set on a narrow spur and dating from the 1050s.²⁶ Furthermore we see the construction in an axial line of a 'motte barrage' with connected bailey at its backside and a separated 'motte refuge' or residential one at the end of the spur.²⁷ For Belgium the twin mottes of Braine-le-Château show this design in an excellent way (second half of the eleventh century).²⁸ It is of course quite impossible to determine at face value and without excavations whether these variations represent certain 'evolutionary steps' as well.

A 'ringwork-motte'?

In some way comparable with the specific group of mottes above, but nevertheless of a slightly different configuration, is the combination of a ringwork and a motte, for instance at Montreuil-l'Argillé (Eure) in Normandy. On a natural ledge above the village a nice ringwork is situated, which has a motte next to the entrance as an integral part of its crescent shaped rampart (Fig. 7). The *castellum* belonged to the Giroie family, rivals of the counts of Bellême in the early eleventh century.²⁹ Unfortunately, there have been no excavations to date the site, but from a strategic point of view the motte-element is quite essential to have at least some preponderance over the adjacent plateau.

The example of Montreuil-l'Argillé takes us back to the Netherlands for the ringwork of the Duno near Oosterbeek above the river Rhine. The half-circular rampart here

²⁴ Bur, e.a., *Vestiges*, II, 75-77; M. Bur, 'Recherches sur les plus anciennes mottes castrales de Champagne', *Château Gaillard*, IX-X (1982) 61-62. It is interesting to compare Montaigu with the sites of Montgaçon, Montpensier and St. Romain in Auvergne (Fournier, 'Vestiges de mottes castrales', 158) and Montmiral and Peyrins in the Dauphiné (Colardelle and Mazard, 'Premiers resultants des recherches sur les "mottes" médiévales', 68, 77-78, 89-90). And also with the excavated site of Niozelles (late tenth, early eleventh century) in the Provence (D. Mouton, 'L'édification des mottes castrales de Provence, un phénomène durable: Xe-XIIIe siècles', *Château Gaillard*, XVI (1994) 309-312, 315, 319).

²⁵ E.g. Le Mont-de-Beauvray; Stonne (Bur, e.a., *Vestiges*, II, 78-81, 138-140).

²⁶ See: Higham and Barker, *Timber Castles*, 102-103, 111. Grimbosq is related to the here described subtype of 'motte-plus-bailey at its backside', but its motte has already a (very modest) encircling dry ditch.

²⁷ Fine specimen at Cornay, Ardennes (Bur, e.a., *Vestiges*, I, 35-37) and Moeslains, Haute-Marne (Bur, e.a., *Vestiges*, III, 87-89). The twin mottes in Saint-Céneri-le-Gérei (Orne) have to be classified this way (see: P. Bauduin, 'Une famille châtelaine sur les confins normanno-manceaux: les Géré (Xe-XIIIe s.)', *Archéologie Médiévale*, XXII (1992) 329-330, 354).

²⁸ R. Borremans 'Les "monts", vestiges d'une forteresse à Braine-le-Château (Brabant wallon)', in: T.J. Hoekstra, e.a., ed., *Liber Castellorum. 40 variaties op het thema kasteel* (Zutphen, 1981) 201-204.

²⁹ Davison, 'Early earthwork castles', 42-43; M. Mesnil, *La préservation de la motte féodale de Montreuil-l'Argillé* (s.l., 1992); Bauduin, 'Une famille châtelaine', 325-326, 351.



Fig. 7 Montreuil-l'Argillé (F), ringwork with motte as an integral part of the half-circular rampart (*Photo author 1993*)



Fig. 8 Ringwork of the Duno (Oosterbeek, NL) with projected platform ('bastion') at the back to the right (*Photo author 2002*)

shows a special projected platform, that serves as a kind of exposed bastion next to the original entrance of the fortification (Fig. 8). The suggestion has been made recently that this so-called platform was a former motte element as part of the rampart or maybe the predecessor of something like that. The Duno ringwork belonged to the castles of the already mentioned couple Balderik and Adela (like *Opladen*/ Montferland), but represents a somewhat older generation of earthwork fortifications dating from the tenth century.³⁰ If archaeology can prove one day that the 'platform' has been a motte as an integral part of the circumvallation, we have an interesting stepping stone towards *Opladen* as a ringwork upon an enormous motte and towards *Mergelpe* with its configuration of 'motte barrage' with linked-up bailey banks. The latter had a plan that became more common, as we noticed above in the other examples from Western Europe, with or without a complete circumvallation of the bailey section.

Yet the integrated 'motte and bank' still presents moments of confusion, especially when the motte part is not that much elevated, for instance in the excavated example

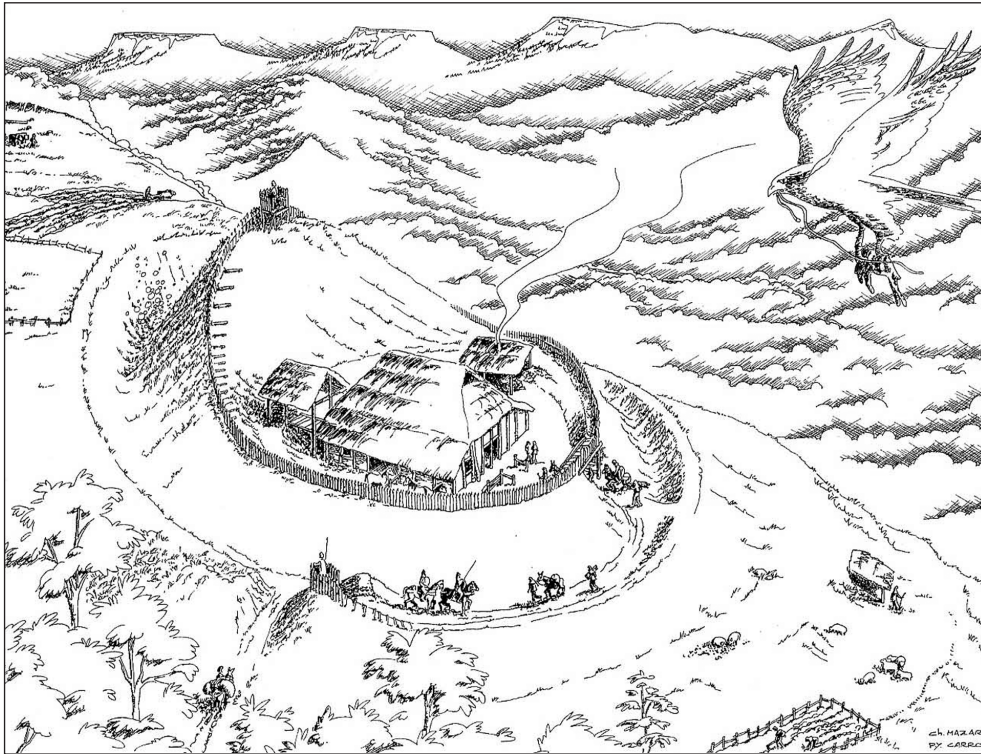


Fig. 9 Impression of the motte-plus-rampart of Le Châtelard (Viron, F)

³⁰ Schut, 'De Montferlandsche berg', 70-71; idem, 'Oud onderzoek opnieuw bekeken'; Aarts, "'Montferland'" en de consequenties'.

of Le Châtelard (circa 1030) near Voiron in the Dauphiné.³¹ However, the absence of a real bailey outside the deep dry ditch underlines the idea of a 'motte et basse-cour emboîtée' (Fig. 9).

Less known, but quite interesting to compare with the motte-plus-rampart of the half-circular stronghold of Montreuil-l'Argillé on its natural ledge, is the example of *Altenberg* in Reifferscheid (Eifel, Germany), destroyed in 1106.³² And again in France there is the castle of Vendôme (Loir-et-Cher), where the later curtain wall (recently collapsed) is based upon a huge rampart with a motte-like elevated part in the corner of this fortification dated before 1035.³³ Perhaps the first castle of Hastings has to be categorized in this particular section of early motte castles as well.

As excavations often fail, chance helps sometimes to catch the 'evolution-factor'. In Chantemerle (Marne) the known ringwork *l'Abbaye* shows a strongly elevated northern 'motte' section of its rampart opposite to the nearby afforested hillside.³⁴ At one time this 'archaic' configuration didn't meet the needs anymore and the 'opposing' promontory across the ditch was cut off and remodelled in an (unfinished) more 'modern' motte, only recently 'rediscovered'.³⁵

The 'motte avancée'

Of a different character, but apparently belonging also to the first generations of mottes, are the 'mottes avancées' or outposts at some distance (but always within sight) of the main complex.³⁶ For the Netherlands, we already noted the second motte of *Mergelpe*, right above the river valley (Fig. 10).³⁷ In Belgium, there is the remarkable 'motte avancée' of *Beaumont* (La Ramonette) over the stronghold of Bouillon. This is dated to the middle of the eleventh century and it has proved its military value at the siege of 1141.³⁸

A relatively great number of these 'motte outposts' can be found in the Loire region of Central France. Apparently they were a common phenomenon in the power strug-

³¹ Colardelle and Mazard, 'Premiers resultants des recherches sur les "mottes" médiévales', 83, 93 ('motte'); M. Colardelle and E. Verdel, *Chevaliers-paysans de l'an Mil au Lac de Paladru* (Paris, 1993) 64-67 ('il s'agit d'une enceinte de terre et non d'une motte classique'), 95-100; J-P. Moyne, *A la découverte du pays d'art et d'histoire des trois vals-lac de Paladru* (s.l., 1993) 24-26; C. Mazard, 'Chirens et ses châteaux. L'enceinte castrale du Châtelard à Chirens', in: M. Colardelle, e.a., ed., *Châteaux médiévaux en Rhône-Alpes* (Grenoble, 2004) 11-12, 26 ('l'enceinte castrale'), 28 ('une butte massive de plus de 10 m de hauteur au sommet étroit formant une sorte de motte de barrage du côté le plus vulnérable').

³² H. Herzog, *Burgen und Schlösser. Geschichte und Typologie der Adelssitze im Kreis Euskirchen* (Köln 1989) 137-138; O. Wagener, '...wart belacht van dem landfreden das slos van Rifferscheid... Die Landfriedensexekution gegen Reifferscheid 1385', *Burgen und Schlösser*, XLVII, 1 (2006) 23, 25, 27-28.

³³ Mesqui, *Châteaux et enceintes de la France médiévale*, I, 232; Aarts, 'Early castles of the Meuse-Rhine Border Region', 22, n. 71. The first castle of Vendôme, dated before 1005, probably was a motte near the chapel of St. Pierre-la-Mothe situated between two branches of the Loir in the city centre. A new castle was built on a natural ledge over the town before 1035 (Fournier, *Le château dans la France médiévale*, 292-296).

³⁴ Bur, e.a., *Vestiges*, III, 38-41; Mesqui, *Châteaux et enceintes de la France médiévale*, I, 28 (Fig. 18: 'Motte et enceinte villageoise'. His 'Motte seigneuriale' at 165m south is more likely a motte-outpost or 'motte avancée').

³⁵ Observation site by author 2000.

³⁶ E.g. J. le Maho, 'Fortifications de siège et "contre-châteaux" en Normandie (XIe-XIIe s.)', *Château Gaillard*, XIX (2000) 181-189.

³⁷ Aarts, 'Early castles of the Meuse-Rhine Border Region', 16, 21; Schut, *De Montferlandsche berg*, 69-70.

³⁸ Aarts, 'Early castles of the Meuse-Rhine Border Region', 21 n. 62; De Meulemeester and Matthys, 'De militaire architectuur', 170. On Bouillon: A. Matthys 'Les fortifications entre Lesse et Semois', in: H.W. Böhme, ed., *Burgen der Salierzeit* (2 dln.; Sigmaringen, 1991), I, 226-234.

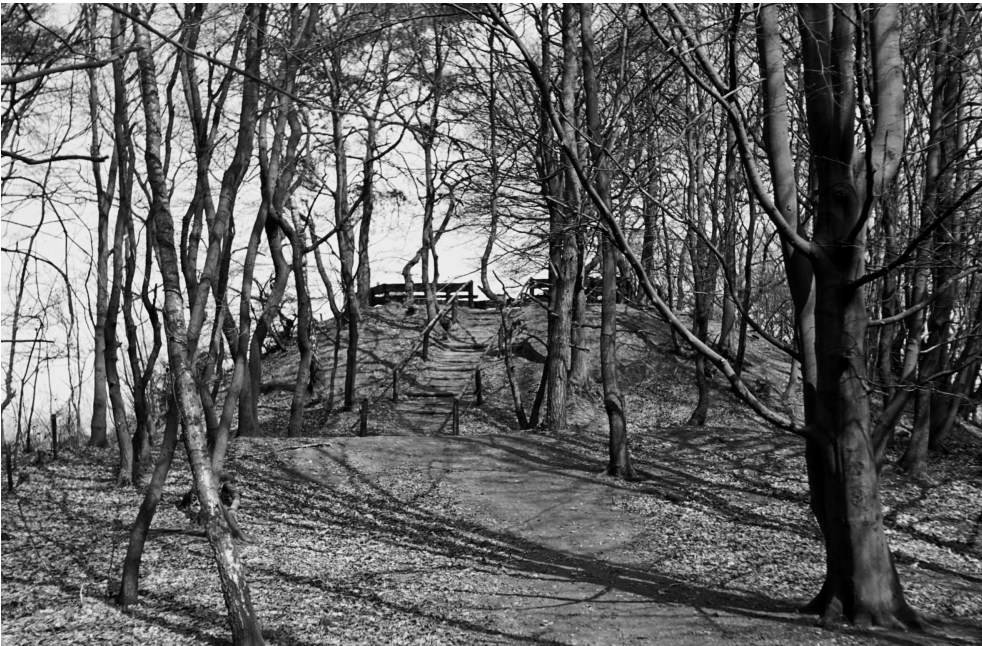


Fig. 10 *Motte avancée* of Mergelpe (Ubbergen, NL) with ditch and outer bank
(Photo author 1979)

gle between the counts of Anjou and Blois around 1000 AD. Some specimens are visible at Langeais, Amboise and Montbazou (Bazonneau).³⁹ The castle sites themselves of the Loire valley, now famous for their quite early stone keeps by count Fulco Nerra of Anjou or his opponents, also often had their origins in a motte (sometimes a 'motte barrage'). These early mottes, with their 'atypical' features, are still surprisingly neglected by modern research, which concentrates mainly on the keeps' building history.⁴⁰ This with the exception of Doué-la-Fontaine (Maine-et-Loire), where the well-known excavation by M. de Boüard revealed an *aula*, which was converted into a towerhouse (circa 950) and which was 'enmotted' around 1000 for its ground floor and which became surrounded, at that time, by a 'real' ditch.⁴¹

The quest for 'the oldest motte'

The belligerent activities of Anjou and Blois along the Loire are well documented and the texts even present some remarks about the earthworks involved, but unfortunate-

³⁹ Aarts, 'Early castles of the Meuse-Rhine Border Region', 18-21.

⁴⁰ See on this problem: E. Zadora-Rio, 'Le comté d'Anjou', in: Barral i Altet, ed., *Le paysage monumental de la France*, 585-588; A. Châtelain, 'Les châteaux forts de l'an mil à 1150', in: J.P. Babelon, ed., *Le Château en France* (Paris, 1988) 40; Aarts, 'Early castles of the Meuse-Rhine Border Region', 18-22; J. Mesqui, 'La tour maîtresse du donjon de Loches', in: E. Impey, E. Lorans and J. Mesqui, *Deux donjons construits autour de l'an mil en Touraine. Langeais et Loches* (Paris, 1998) 68, 70-71, 75; P. Durand, 'Le château de Moncontour', *Les Amis du Pays Lochois*, XVII (2001) 144-146, 149; N. Faucherre, 'Le château de Montbazou', *Les Amis du Pays Lochois*, XVIII (2003) 124.

⁴¹ M. de Boüard, 'De l'aula au donjon. Les fouilles de la motte de La Chapelle à Doué-la-Fontaine (Xe-XIe siècles)', *Archéologie Médiévale*, III-IV (1973-1974) 5-110.

ly they never show the same clarity as the accounts by Alpertus Mettensis for the Lower Rhine region.⁴²

In castle literature, there has been some discussion about the interpretation of other early ‘motte’-texts dealing with events of the tenth century, for instance, texts concerning the still existing motte-in-the-swamp of *Chantereine* at Thin-le-Moûtier (Champagne-Ardenne)⁴³ and the now almost vanished site of Vinchy upon the river Scheldt near Cambrai (Nord).⁴⁴

This search for the ‘oldest motte of Europe’ has been overtaken in some way by the recent excavations of the ancient ‘oppidum’ of Boves near Amiens in Northern France. Here, a large rampart cuts off a spur to form an ‘éperon barré’, but already in Late-Carolingian times (circa 900) a vast platform (up to 12m high) was added to the backside of the rampart. It formed the seat of a residential settlement, which gradually developed into a Late Medieval castle with a keep from the fourteenth century (Fig. 11).⁴⁵ Boves is an important key to understand early mottes and their origins as far as they were intended to use or strengthen the lines of defence on natural heights.



Fig. 11 Fourteenth century c. keep of Boves (Amiens, F) upon the motte at the backside of the rampart of the ancient *éperon barré* (Photo author 2002)

⁴² Aarts, ‘Early castles of the Meuse-Rhine Border Region’, 18-22.

⁴³ Bur, e.a., *Vestiges*, II, 30-32; Collective, ‘Les fortifications’, 25-26; Bur, ‘Recherches’, 56-57; M. Bur and H. Richard, ‘Occupation du sol et peuplement dans la vallée du Thin (Ardennes) au haut Moyen Âge’, *Archéologie Médiévale*, XVII (1987) 93-103; Bur, ‘Le château’, 80; idem, *Le Château*, 33.

⁴⁴ M. Rouche, ‘Vinchy: le plus ancien château à motte’, *Mélanges d’Archéologie et d’Histoire médiévales en l’honneur du Doyen Michel de Boüard* (Genève, 1982) 365-369; J. de Meulemeester, ‘Castrale motten in België’, *Archaeologia Belgica*, CCLV (1983) 209; Cathcart King, *The Castle in England and Wales*, 38; Higham and Barker, *Timber Castles*, 93; J. de Meulemeester, ‘Mottes castrales dans les anciens Pays-Bas méridionaux. Un bref historique de la recherche’, in: *Interdisziplinäre Studien zur europäischen Burgenforschung. Festschrift für Horst Wolfgang Böhme zum 65. Geburtstag* (2 dln.; Braubach, 2005), II, 176-177.

⁴⁵ P. Racinet and L. Droin, ‘De la résidence carolingienne à la motte: le complexe castral et prioral de Boves (Somme, France) des IXe-Xe aux XIIe-XIIIe siècles’, *Château Gaillard*, XX (2002) 207-226; P. Racinet, ‘Un lieu de pouvoir exceptionnel aux portes d’Amiens: Boves (Xe-XIIe siècle)’, in: A-M. Flambard Héricher, ed., *Les lieux de pouvoir au Moyen Âge en Normandie et sur ses marges* (Caen, 2006) 119-148.

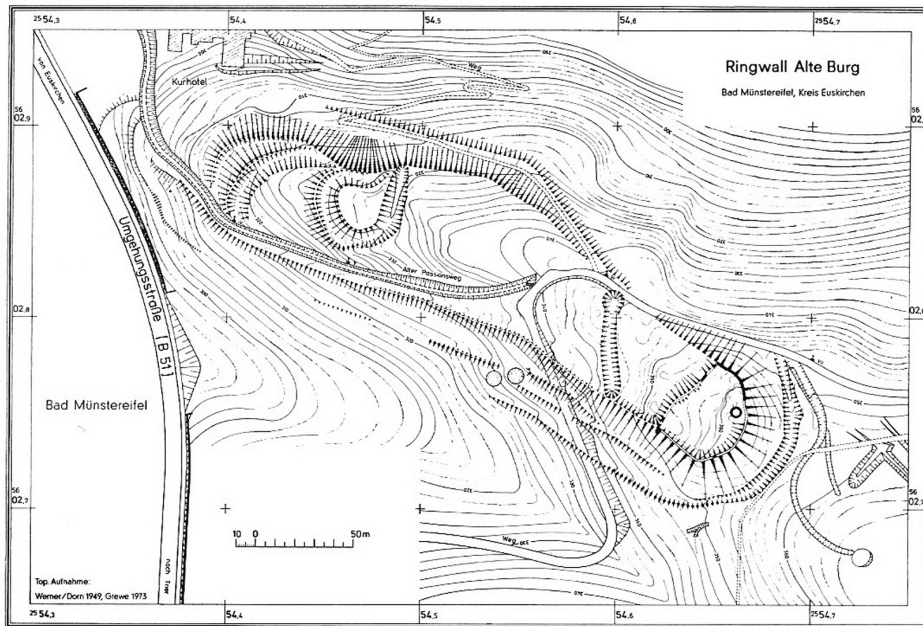


Fig. 12 Plan of Alte Burg im Quecken (Bad Münstererifel, GFR) with motte-element in the lower western Carolingian section of this refuge hillfort

If the results at Boves force us to accept, reluctantly, the possibility of quite early dates for 'atypical' mottes in Western Europe, it is noteworthy also to look at the impressive hillfort *Alte Burg im Quecken* high above Bad Münstererifel in the German Eifel region. This large earthwork was built about 800 as a refuge for the monastery below. In its lower and oldest section stands an irregularly formed motte in its own dry ditch and with stone foundations on top. Despite some limited research, we still do not know if this intriguing motte belongs to the Carolingian phase or to an enlargement of the site during the eleventh century, when higher up the spur a kind of walled citadel was added with a round tower inside (Fig. 12).⁴⁶

'Kernmotte' and 'Hochmotte'

The awareness of the possibility of quite early dates for mottes on natural hill sides opens the debate again about the interpretation of certain lowland sites. Their excavation (at Werken in Belgium⁴⁷ and Douai, Nord, France⁴⁸) demonstrated the gradual

⁴⁶ W. Janssen, *Studien zur Wüstungsfrage im Fränkischen Altsiedelland zwischen Rhein, Mosel und Eifelrand* (2 dln.; Köln-Bonn, 1975), II, 110-111; W. Janssen, 'Bad Münstererifel im Mittelalter', *Nordöstliches Eifelvorland* (Mainz, 1976) 185-187; Herzog, *Burgen und Schlösser*, 74, 392-395.

⁴⁷ J. de Meulemeester and C. Vanthournout, 'De "Hoge Andjoen"-motte te Werken (gem. Kortemark)', *Archaeologia Belgica*, II, 1 (1986) 105-108, 125; Van Strydonck and Vanthournout, 'Dating the "Hoge Andjoen" motte', 441-452.

⁴⁸ P. Demolon and J. Barbieux, 'Fouilles Médiévales à la Fonderie', *Amis de Douai*, VII, 4 (1977) 63-66; P. Demolon, 'Douai (Nord)', in: Barral i Altet, ed., *Le paysage monumental de la France*; P. Demolon, e.a., *Mottes et Maisons-fortes en Ostrevent Médiéval* (Douai, 1988) 12, 63-64; P. Demolon and G. Jelski, *Aux origines de la ville et des residences comtales de Douai* (cd-rom, film, 1982).

heightening of a 'Kernmotte' from the tenth century to a 'Hochmotte' from the eleventh/twelfth century, as was done before by A. Hernnbrodt for the *Husterknupp* in the Rhineland many years ago.⁴⁹ But it left always undecided whether the 'Kernmotte' was already a 'real' motte, or just a literally status-rising platform of predominantly social impact. For a real 'Hochmotte' or 'motte castrale' we like to have 'physical' evidence of a military defensive nature, preferably at least 3m in height. But that is quite subjective, I'm afraid. The determination of the military defensive nature of the earthwork depends more on the relation of the earthwork to the structure above or 'enmotted' within and, of course, to the needs, rights and status of its noble owner. In that sense, the timber structure of king Lothaire (965) at Douai (La Neuve-Tour), 'enmotted' for only 1.80m at three sides and surrounded by a moat, still puzzles us.⁵⁰ By 987, the count of Flanders used the royal building as a base for a small timber tower (4 to 5m). An enlargement and heightening of the earthwork up to 3m seems to have met his military needs in controlling the city of Douai.⁵¹ Do we here just cross the line between a 'Kernmotte' and a 'motte castrale'?

There has always been a complicated relationship between the (strictly conditioned) expected defence capability of a motte (in height, inclination angle and ditch) and the (less defined) aspects of a motte as a status symbol by having a raised platform for residential purposes. Though traditionally we are focused on the military aspects, the symbolic power of the 'motte castrale' (as a base for the lord's tower upon it) may never be underestimated. Even in later centuries, when the castle site was already abandoned, some feudal ceremonies were still held upon the abandoned platform, 'à cause de la motte'⁵², since the motte in many cases was the oldest and most impressive landmark by the lord upon his domain.

Conclusive remarks

This paper has emphasised some aspects of early mottes in Western Europe and their appearances. From the beginning of the tenth century on, an interesting variety in 'experimental' artificial castle mounds arises, both in lowland and hill side areas, with or without their own ditches and in an ever changing pattern in their relationship to a subordinated bailey.

In that light, we can help some French colleagues to overcome their hesitation in accepting the early motte character of certain for the larger part natural 'buttes' (with-

⁴⁹ See: Friedrich, 'Salierzeitliche Burganlagen', 179-182.

⁵⁰ Demolon, *Mottes et Maisons-fortes*, 12.

⁵¹ Demolon, 'Douai (Nord)', 547 (heightening up to 3m); Bur, 'Le château', 76. De Meulemeester ('Le début du château: La motte castrale dans les Pays-Bas méridionaux', *Château Gaillard*, XVI (1994) 126 n. 58; 'Mottes castrales', 177) still considers this earthwork in Douai (in existence from circa 987 until the end of the twelfth century) to be a 'Kernmotte'.

⁵² E.S. Armitage, *The Early Norman Castles of the British Isles* (London, 1912) 307; M. de Bouïard, *Manuel d'archéologie médiévale. De la fouille à l'histoire* (Paris, 1975) 94; Fournier, *Le château dans la France médiévale*, 79-80; Higham and Barker, *Timber Castles*, 95. In 1621 a military representative of the duke of Brabant marched on the village of Kessenich (Belgium) to demonstrate certain rights claimed by his master. From the top of the abandoned motte he ordered (in accordance with 'ancient customs') to throw down a ploughshare in the four wind-directions and to mark the 'landingplaces' by a peg (P. Henkens, 'Kessenich moest vroeger twee heren dienen om zijn vrijheid te kunnen behouden', *Ter Eiken*, XVIII, 2 (1993) 19, 22).

out a complete encircling ditch around their base) that we find as early seats of power at 'Montf  lix' (Marne, 952)⁵³, Rumigny (Ardennes),⁵⁴ l'Isle-Aumont (Aube)⁵⁵ and Bell  me - St. Santin (Orne).⁵⁶

In addition, we were able to distinguish a kind of next generation subgroup, consisting of the 'motte barrage'-type with an interwoven adjacent bailey at its back. This subtype makes a good chance to be represented in Leyden as well (circa 1000). During the second half of the eleventh century the layout evolves into the more geometrical perfect 'classical' motte-with-separated-bailey of which the *Husterknupp* (Period IIIB) in the Rhineland (circa 1050)⁵⁷ and Hen Domen (Montgomery) for Britain (ca 1070)⁵⁸ belong to the first and best dated examples.

We may conclude that a motte is still a motte, but not necessarily the motte one has in mind for the eleventh century, not to mention any earlier period.

Samenvatting

Hoewel de moderne archeologie allerlei kenmerken en details van de motte-burcht als een kasteeltype-in-ontwikkeling blootlegt, overheerst in de literatuur met betrekking tot met name de vroege kastelen nog vaak het statische beeld van een in wezen reeds uitgebalanceerd 'klassiek' motte-model van een omgrachte ronde kunstmatige burchtheuvel, vergezeld van een eveneens omgrachte voorburcht, beide voorzien van een al of niet uitgebreide (houten) opbouw.

Met voorbeelden uit geheel West-Europa, vanuit vaak minder bekend (lokaal) onderzoek en eigen waarnemingen, probeert de auteur een 'evolutiemodel' te schetsen, waarin diverse stadia van experimenteren en een ontwikkeling van subtypen zichtbaar worden, die pas vanaf omstreeks 1050 gaan leiden tot het meer uitgekristalliseerde 'klassieke' motte-type, dat vervolgens in een versteende vorm doorzet tot in de 13de eeuw. Het benadrukken van de 'evolutiefactor' dient mede om de (weinige) Nederlandse vroege motte-burchten – met hun op het eerste gezicht 'afwijkende' kenmerken – toch een duidelijke plaats te kunnen bieden binnen een bredere Europese context. Zo kan het voor Nederland unieke dubbele motte-complex van Mergelpe/Duivelsberg bij Nijmegen van circa 1000 herleid worden tot het subtype van de *motte barrage* met vooruitgeschoven *motte avanc  e*.

⁵³ Bur, e.a., *Vestiges*, III, 91-94; Mesqui, *Ch  teaux et enceintes de la France m  di  vale*, I, 31; A. Renoux, 'Chavot (Marne). Le ch  teau', *Arch  ologie M  di  vale*, XXIV (1994) 489-490; Renoux, 'Les mutations morphologiques et fonctionnelles', 262 ('la butte septentrionale est au coeur du complexe initial [...] la depression qui la limite au sud [...] en lui donnant l'aspect d'une "motte"'), 263.

⁵⁴ Bur, e.a., *Vestiges*, II, 127-131.

⁵⁵ Bur, e.a., *Vestiges*, IV, 71-73; Renoux, 'Les mutations morphologiques et fonctionnelles', 262.

⁵⁶ The isolated 'butte Saint-Santin' (*castrum* before 1005/1012) was to be abandoned (*vetus castrum*) before 1030/1035 for a new castle (with a *terrale turris* 1092, an 'enmotted' timber tower?) in the city centre. See: Collective, 'Les fortifications', 31-32; G. Louise, 'La Seigneurie de Bell  me, Xe-XIIIe si  cles', *Le Pays Bas-Normand (Soci  t   d'Art et d'Histoire)*, LXXXIII (1990) no. 199-200, 63-64, 194-195, 230; G. Louise, 'La mise en place du r  seau castral sur les confins de la Normandie et du Maine dans le cadre du futur territoire du d  partement de l'Orne (Xe-XIIIe si  cles)', in: *Autour du ch  teau m  di  val* (Alen  on, 1998) 13-14; Racinet 'Un lieu de pouvoir exceptionnel', 136.

⁵⁷ R. Friedrich 'Die fr  hen Perioden der Motte Husterknupp. Neue Untersuchungen zur Keramik', *Ch  teau Gaillard*, XVI (1994) 209-210.

⁵⁸ Higham and Barker, *Timber Castles*, 326-347; Higham, 'The development of a timber castle', 113.

Gevoegd bij een juiste interpretatie van vroege schriftelijke bronnen, als die van Alpertus van Metz (circa 1022) voor het Midden-Nederlandse rivierengebied, kan zo een bijdrage worden geleverd aan een betere begripsvorming inzake de kasteeltypologie. En dat tevens als een opstapje naar een meer gewenst Europa-breed onderzoek naar dit aspect van de middeleeuwse adelscultuur, die zich immers juist door haar burchtenbouw zo duidelijk manifesteert.