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## Towns, roads and development dynamics in the Arverni's territory in Roman times (Auvergne, France)

Frédéric Trément, Florian Baret, Marion Dacko, Jérôme Trescarte, Maxime Calbris, Lise Augustin, Guy Massounie

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*Regional Urban  
Systems in the  
Roman World,  
150 BCE – 250 CE*



*Edited by*

LUUK DE LIGT & JOHN BINTLIFF

MNEMOSYNE SUPPLEMENTS HISTORY AND ARCHAEOLOGY OF CLASSICAL ANTIQUITY

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# Regional Urban Systems in the Roman World, 150 BCE – 250 CE

*Edited by*

Luuk de Ligt  
John Bintliff



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# Towns, Roads and Development Dynamics in the Territory of the *Arverni* in Roman Times (Auvergne, France)

*Frédéric Trément, Florian Baret, Marion Dacko, Jérôme Trescarte, Maxime Calbris, Lise Augustin and Guy Massounie*

## 1 Introduction

The purpose of this paper is to examine the relationship between road networks, small towns and regional development in the territory of the *Arverni* during Roman times. It is based on data acquired in the framework of the DYPATER programme, which sets out to model the dynamics of territorial development in the Massif Central region of France from the Iron Age to the Middle Ages.<sup>1</sup> This programme has recently been supplemented by several doctoral research projects, including that of Marion Dacko<sup>2</sup> on the ancient road network in the *civitates* of the *Arverni* and the *Vellavi*, and that of Florian Baret<sup>3</sup> on secondary agglomerations in the Massif Central. Several other doctoral dissertations, already defended<sup>4</sup> or still work in progress,<sup>5</sup> as well as a series of discoveries made during properly planned archaeological investigations or while carrying out rescue excavations have helped to round off this completely renewed overview of the organisation of the territory of the *Arverni* in Roman times.

One of the major results of this research has been to show major disparities in the levels, pace and modalities of development that can be observed in various geographical areas.<sup>6</sup> To try to account for these differences, it was considered the best plan was to use the 'core/periphery' model developed by John Friedmann and his typology of regional development.<sup>7</sup> This model shows how

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1 Trément 2011–2013.

2 Dacko 2016.

3 Baret 2015.

4 Ducreux 2013; Fassion 2013; Trescarte 2013; Massounie 2015.

5 Augustin in progress; Calbris in progress; Delpy in progress.

6 Trément 2010; 2013a; Trément and Carvalho 2013; Trément et al. 2014.

7 Friedmann 1966.

and why different parts of a territory develop at different rates, and how they evolve over time as a function of spatial interactions.<sup>8</sup>

Its application to the territory of the *Arverni* in the period corresponding to the Early Empire reveals four areas of unequal development on the regional level (Fig. 5.1): a 'core region': the Clermont Basin and the Limagne Plain; an 'upward-transition region': the Allier Valley; 'low-development areas': the peripheral uplands; and, within the latter, 'peripheral sectors open to development', that will be called 'integrated margins'.<sup>9</sup>

## 2 The Clermont Basin and the Grande Limagne Plain: A 'Core Region'

During the late Iron Age and the Roman era the Clermont Basin and the Grande Limagne Plain exhibited the criteria that characterise a 'core region' in Friedmann's typology, not only because of their geographical situation in the heart of the territory of the *Arverni*, but above all on account of the convergence of major roads, the concentration of political power, population, economic activities and, on a more general level, wealth (Fig. 5.1). Although this area accounted for a relatively small proportion of the city's territory (about 5%), it was by far the most densely populated zone and the seat of the most important urban centre, *Augustonemetum* [14],<sup>10</sup> the administrative chief town in which the municipal elite resided. A wide range of economic activities were concentrated in this space, in particular the most important pottery production workshops (Lezoux [17], Les Martres-de-Veyre [22]). It also contained the majority of the villas that have been recognised in the territory of the *Arverni*, notably almost all the higher-ranking villas.<sup>11</sup> Much of the economic activity involved high value-added products requiring significant investment (vegetable crops, viticulture, ceramics).

The widespread diffusion of the *terra sigillata* ware produced in Lezoux and the saturation of the regional market with the production of the various workshops suggest that these investments generated significant profits. The research conducted by Jérôme Trescarte<sup>12</sup> shows the surprising capacity for innovation on the part of Arvernian potters from the end of the Iron Age. In the lower part of the Allier Valley and its alluvial plain, in which the main centres of

8 Trément 2014.

9 Some examples of these are identified in green on the map in Fig. 5.1.

10 The numbers in square brackets refer to the numbering of the agglomerations in Fig. 5.1.

11 Dousteysier et al. 2004; Dousteysier and Trément 2007.

12 Trescarte 2013.

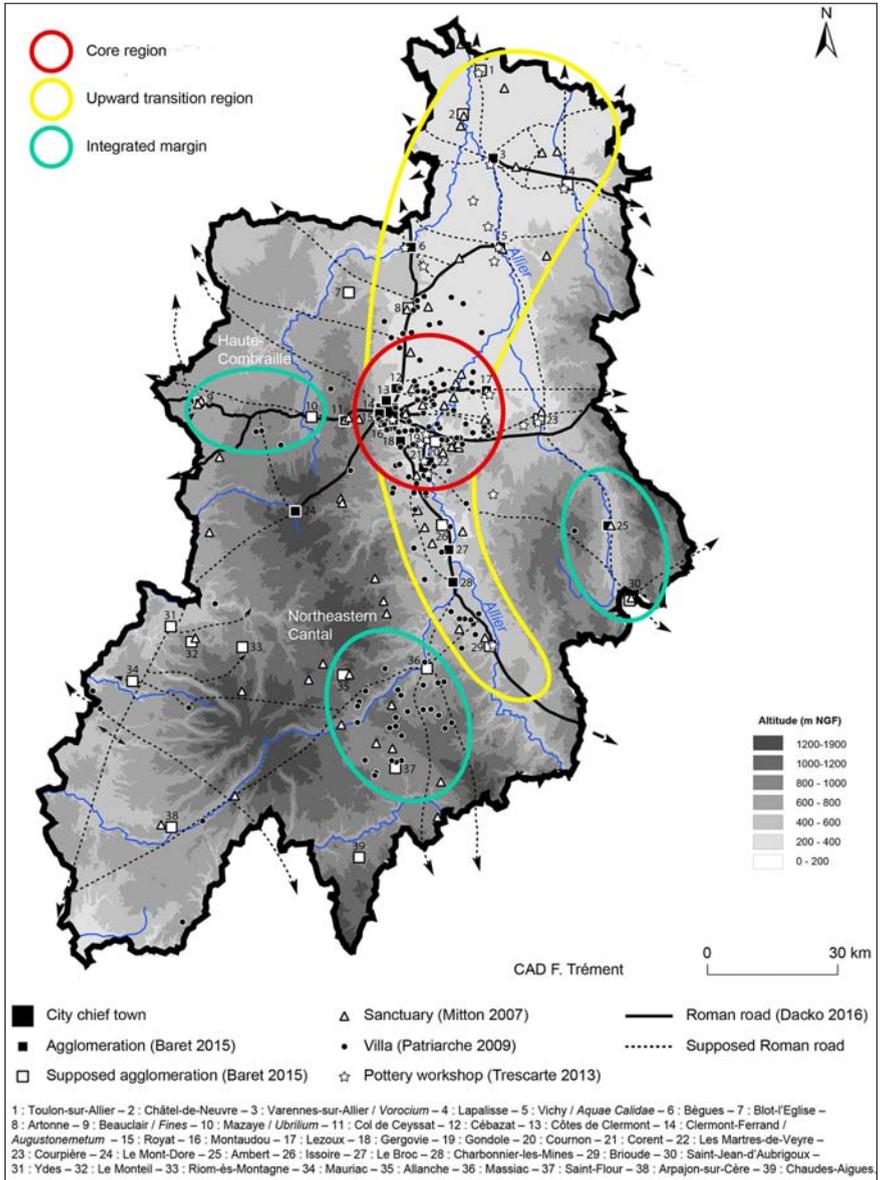


FIGURE 5.1 Modelling of regional dynamics of development in the territory of the *Arverni* in the Early Empire  
 CAD: F. TRÉMENT

power and population of final La Tène developed, we notice the early rise of an organised pottery manufacture inspired by both indigenous tradition and Roman imports. This development, which stimulated the production of new high-quality ceramics, began as early as the mid-first century BCE. The proliferation of workshops and the early dissemination of their increasingly standardised products are indicators of networking by the potters responsible for this production.

Far from causing any interruption to the Arvernian potter's craft, the Roman conquest was followed by an expansion in the number of workshops, initially along the north-south axis which was the main corridor for the circulation of people and goods and in which we find most centres of consumption, that is to say, most of the agglomerations that developed in this period. In the first century CE these workshops quickly adapted to the new standards required for manufacture of large-scale ceramics, integrating the production of standardised ceramics on an expanded scale, especially the manufacture of *terra sigillata*.

This capacity for innovation, that is one of John Friedmann's core-region features, is also found in other fields, the most spectacular example being the early implementation of drainage techniques that shaped the landscape on a large scale.<sup>13</sup> We could also mention the famous temple of Mercury built on top of the Puy de Dome or the passage in Pliny the Elder mentioning the visit of the famous Greek sculptor Zenodoros, who was commissioned by the *Arverni* to erect a colossal bronze statue of this same god.<sup>14</sup>

In this space dominated by the chief town of the *civitas* [14], the identification of secondary agglomerations has been a problem of long date. Before the late 1990s only one such agglomeration had been found, at Les Martres-de-Veyre [22], about 15 km south of Clermont, on the banks of the Allier River.<sup>15</sup> However, between 2000 and 2010 several new agglomerations were discovered. The excavations carried out at the Col de Ceyssat [11], about 10 km west of Clermont, revealed an important roadside settlement and religious complex. Its location, at an altitude of between 1,000 and 1,250 m, is explained both by the trajectory of the Agrippa road, which connects Lyon and Saintes via Clermont and Limoges, and by the presence of the temple of Mercury at the top of the Puy de Dôme.<sup>16</sup>

The existence of an agglomerated habitat has also been hypothesised in connection with the Montaudoux theatre [16], located 2 km south-west of Cler-

13 Trément ed. 2007; Trément 2012.

14 Plin. *NH* 34.18.45–47.

15 Romeuf 2001.

16 Trément 2003; 2013b.

mont, at which the latest discoveries have revealed buildings extending around the spectacular edifice and its sanctuary, following an orientation imposed by the stage wall.<sup>17</sup> Moreover, the excavations carried out at the sites of the three *oppida* of Corent [21], *Gergovia* [18] and Gondole [19] have shown a continuity of occupation during the Roman period, in a form that can be compared to that of fully fledged secondary agglomerations.

In Corent [21], the latest excavations carried out around the sanctuary and the Roman theatre suggest that the agglomeration of the Early Empire was less important than that of the Second Iron Age.<sup>18</sup> In *Gergovia* [18] excavations carried out since the eighteenth century have revealed the presence of a large sanctuary of the Early Empire as well as traces of domestic quarters and craft activities from the first half of the first century CE. Remains of roads have also been discovered, but as yet not enough is known about the dispersion of archaeological features on the plateau to allow us to reach an adequate understanding of the morphology of this agglomeration.<sup>19</sup> In Gondole a potters' quarter extended over about 40 hectares in the second half of the first century BCE. This area was situated outside a monumental rampart that marked the boundary of a regular centre of habitation covering approximately 30 hectares. Unfortunately, the evolution of occupation after the beginning of the first century CE is still poorly understood.<sup>20</sup> On the site of Les Côtes de Clermont [13], the excavation of a monumental complex composed of at least one temple and its ancillary buildings and the presence of an artisanal district and domestic units to the south suggest the existence of a settlement of the Early Empire on the hill that dominated the chief town of the *civitas*.<sup>21</sup> In Lezoux [17], the 2002 discovery of a putative 'arena building' in the centre of the town also raises the question of the existence of an agglomeration.<sup>22</sup> Finally, recent research has revealed the existence of a small agglomeration at a crossroads 6 km north of Clermont-Ferrand, in the commune of Cébazat [12], prior to the development of the economic activity area of Les Montels III.<sup>23</sup> Here the remains of a Gallo-Roman *fanum* were discovered. This sanctuary was the successor to a proto-historic place of worship and was situated along an ancient east-west road. In the western part of the area investigated, several structures that were

17 Darteville 2010; Darteville and Le Barrier 2016: 545 and 551.

18 Poux ed. 2015; Poux and Demierre 2016.

19 Garcia 2008; 2009; 2013; Jud 2016.

20 Deberge et al. 2009.

21 Cléménçon and Fauduet 2003.

22 Baucheron 2002a; 2002b.

23 Delhoofs 2015.

used as dwellings and workshops as well as a complex hydraulic network have been discovered. These features extended along a path that was at right angles to the main road, over a distance of 150 m. To the north, a vast necropolis for cremated remains marks the limit of this small hamlet. The remains of a Roman villa have been identified by INRAP only 200 m to the east.

From the point of view of the urban and economic geography of development, this proliferation of certain or probable secondary agglomerations within a radius of a dozen kilometres from the main town does present some problems. An analysis of the archaeological data available, however, does offer some elements that help to shed some light on the situation. Among the ten agglomerations identified, three sub-categories can be distinguished (Fig. 5.2):

A few settlements were situated within a radius of 2 km from the chief town [14] and seem to have functioned as a kind of physical extension of it. Examples include the thermal baths of Royat [15] and the theatre of Montaudoux [16], both of which may be regarded as integral parts of the capital's suburbs.

A second category of agglomerations is made up of the major sites from the end of the Iron Age that continued to function into the early years of the imperial period. The *oppida* of Les Côtes de Clermont [13], *Gergovia* [18] and Gondole [19], located at distances of 3, 7, and 11 km from the central city, spring to mind. Recent excavations have tended to show that the occupation of these sites during the Roman period was either of short duration (as in the case of Gondole) or on a limited scale. To judge from the evidence currently available, the latter scenario also seems to apply to Les Côtes de Clermont and *Gergovia*. Their proximity to the chief town could explain why these sites were not able to develop significantly after the beginning of the first century CE.

The third category of agglomerations is composed of those settlements whose development benefited from a sufficient distance from the capital. A good example is the site of Les Martres-de-Veyre [22], which was located on the banks of the Allier at a distance of 14 km. This agglomeration seems to have been closely connected to the *oppidum* of Corent [21], which remained an important centre during the Roman period. Another illustration is the road settlement and religious complex of the Col de Ceysat [11], which was located about ten kilometres to the west of *Augustonemetum* (Fig. 5.2). Another member of this category is the pottery complex of Lezoux [17], located 23 km to the east of the capital, on the edge of the Limagne Plain.

Despite the systematic surveys carried out over the last twenty years, no secondary agglomeration has been detected in Limagne des Marais, an ancient swamp area that extends over a large proportion of the eastern and north-eastern parts of the Clermont Basin. In this area villas seem to have dominated the countryside and as yet there is no evidence of secondary settlements. The

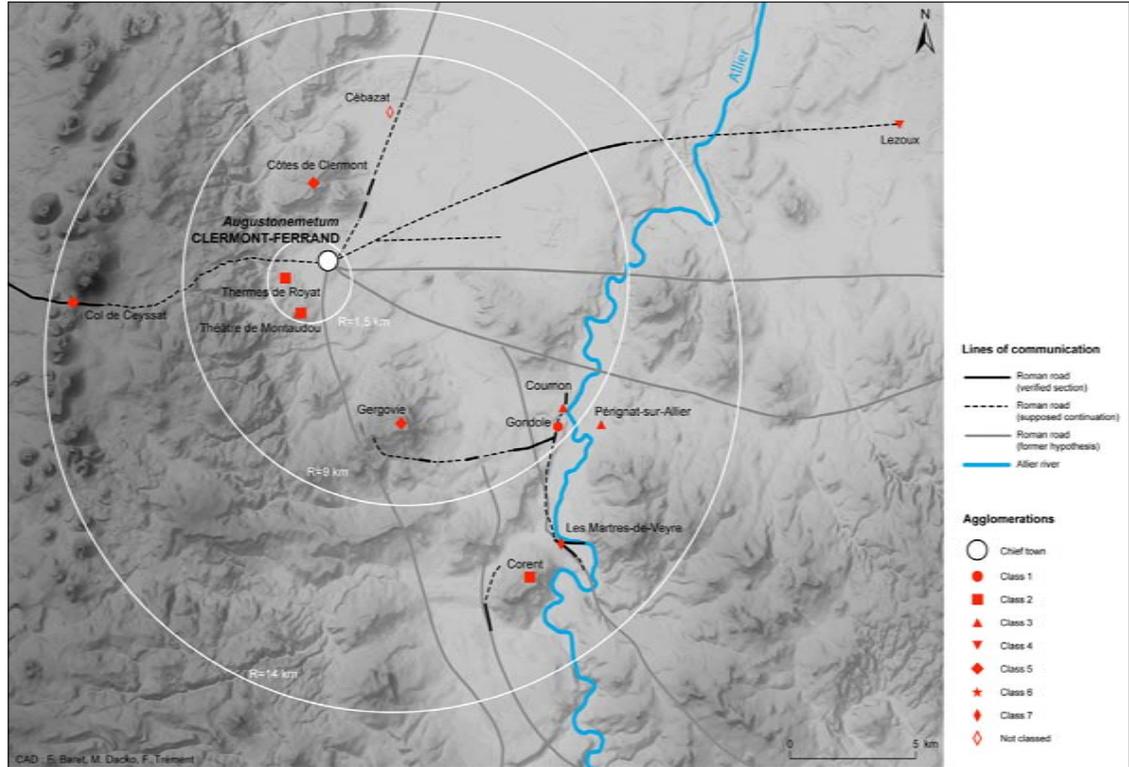


FIGURE 5.2 The Clermont-Ferrand basin in the Early Empire: agglomerations and roads  
 CAD: F. BARET, M. DACKO AND F. TRÉMENT—TYPOLOGY OF AGGLOMERATIONS FROM  
 BARET 2015

recent discovery of the small agglomeration of the ZAC des Montels III in Cébazat [12] does not necessarily contradict this model, insofar as it might have been just a road station/staging post. Admittedly, the plan showing the excavated remains does not support this interpretation but even if we are not dealing with a road station, this small agglomeration might well have depended on the villa located immediately to the east.<sup>24</sup>

From an urban-geographical and historical point of view, the Clermont Basin and its surroundings present a very specific case, whose complexity is particularly attributable to the concentration in a small space of several major sites at the end of Iron Age. Geographical analysis taking into account their forms and functions is an essential tool in the interpretation of this network of agglomerations and their dynamics. As we have explained, the spacing of the various sites seems to have played an essential role in the regulation of an urban network largely inherited from the Iron Age, but deeply disrupted by the foundation of the chief town of the *civitas*.

Knowledge of the road network in the Clermont Basin is unfortunately still fragmentary.<sup>25</sup> While it is logical to assume that the capital was located at the convergence of long-distance roads linking it to the neighbouring cities, these major axes have so far been poorly served by the archaeological record. Paradoxically, some of the secondary roads are better known, such as that linking the main town to the agglomeration of Lezoux [17]. We are particularly well informed about the network of 'minor roads' between the urban centres of Corent [21], Les Martres-de-Veyre [22], *Gergovia* [18] and Gondole [19]. The bulk of the construction of these axes can be dated to the end of the La Tène period (La Tène D2: 70–30 BCE) and to the Augustan period,<sup>26</sup> and seems to have been contemporaneous with a phase of restructuring at the sites of Corent and *Gergovia*.

Furthermore the Allier River also seems to have played an important role in the development of the network of agglomerations. This observation, that is already pertinent to the end of the Iron Age, also applies to the Roman period. Most of the pottery production centres in particular are located directly on the banks of this river, usually at a crossing point, allowing the transport of ceramics by river and land. This is the case, for example, in Les Martres-de-Veyre [22]<sup>27</sup> and Les Queyriaux in Cournon [20].<sup>28</sup> The pottery complex of Lezoux

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24 Delhoofs 2015.

25 Dacko 2016.

26 Deberge et al. 2014.

27 Romeuf 2001.

28 Bet et al. 1998.

[17], which was situated at a distance of 7 km from the Allier, forms an obvious exception to this pattern. It is believed to have been directly connected to *Augustonemetum* [14] by a secondary road. Traces of this road have been discovered on the left bank of the Allier. There are strong grounds to think that a loading berth was situated at the locality of L'Éguille, in the municipality of Culhat.<sup>29</sup> It is there, in a place called Saint-Martin-de-l'Éguille, that J. Corrocher locates the port of Lezoux. Preliminary surveys carried out by G.B. Rogers have revealed the presence of large amounts of *terra sigillata* pottery, lending support to the idea that L'Éguille might have been the site of a warehouse and a loading berth.<sup>30</sup>

Thanks to the discovery of a cargo of *terra sigillata* ware dating from the second century CE between Vichy and Bellerive-sur-Allier in 1964, we know that some of Lezoux's production was transported by river.<sup>31</sup> During the Early Empire, the establishment of workshops in rural areas, along the Allier, the Loire and their respective tributaries, moving farther and farther away from major urban centres, seems to confirm that these rivers were used for the transport of ceramic products.<sup>32</sup>

The quality of the traditional tableware production and 'pre-sigillata ware' was already famous in the first century BCE, and this reputation could have influenced the decision to turn Lezoux into the most important centre of ceramic production in the Three Gauls.<sup>33</sup> Being situated in the centre of the equilateral triangle formed by the Allier River to the west, the Dore River to the east, and the Agrippan Way (*Via Agrippa*) to the south, at a distance of less than 10 km from each of these transportation axes, Lezoux was ideally located for investors eager to develop a mass production targeting distant markets. Pertinently, the large quantities of wood needed for firing the kilns could be transported from Livradois and Forez by floating them along the Dore River.<sup>34</sup> The ceramics produced could be exported to the north via the Allier (with the port of L'Éguille operating as loading berth) and perhaps also via the Dore. The goods could be carried to destinations in the north or south along the *Cessero-Augustonemetum-Avaricum* road and towards the east and west along the Agrippan Way. The development of the large pottery production centre of Lezoux [17], slightly off the traditional north-south axis constituted by the

29 Trescarte 2013: 390; Dacko 2016.

30 Provost and Mennessier-Jouannet 1994: 89.

31 Corrocher 1977; 1980: 62–64; 1981: 89; Bet and Vertet 1986: 138.

32 Trescarte 2013: 388.

33 Trescarte 2013.

34 Trément et al. 2014.

Allier Valley, strongly suggests that by late-first and early-second century CE land routes complemented waterways as conduits for the transportation of mass-produced mode C *sigillata*, or even competed with such watercourses.<sup>35</sup>

### 3 The Allier Valley: An ‘Upward Transition Region’?

The Allier Valley can be regarded as an ‘upward transition region’, characterised by its peripheral position (although it borders on the Grande Limagne Plain), by its fertile soils advantageous to agriculture and by the availability of a partially navigable waterway. A north-south road that was lined by a string of regularly spaced agglomerations ran parallel to the river. Although the valley represents only about 10% of the territory of the *Arverni*, it contains 11 of the 39 agglomerations that have been identified to date, i.e. almost one-third (28%).<sup>36</sup>

In the southern part of the valley, the alignment and the regular spacing of several agglomerations,<sup>37</sup> as well as Late Roman sources referring to a road linking Clermont and Brioude,<sup>38</sup> encourage us to connect the few stretches so far discovered and to reconstruct a road running along the left bank of the Allier (Fig. 5.1).<sup>39</sup> If we exclude Brioude [29], which remains very poorly known for the Early Empire but is attested as *vicus Brivatensis* during the Merovingian period,<sup>40</sup> the first agglomeration, 17 km farther to the north, is Charbonnières-Mines [28]. Located at a distance of about 42 km as the crow flies from the chief town of the *civitas*, this settlement occupied an area of about 35 hectares, making it the most important agglomeration to have been identified in this area.<sup>41</sup> Its plan was entirely conditioned by the layout of the road that traverses it along a north-south axis. This central road was crossed by a series of alleys at right angles to it, which were lined with *insulae* containing domestic units. The settlement also had a double *cella* sanctuary beside the road to the north of the site.

35 Trescarte 2013.

36 If we add the 11 agglomerations of the Clermont Basin (see above), no fewer than 22 certain or possible agglomerations have been identified in the part of the Allier Valley belonging to the *civitas* of the *Arverni*. These 22 agglomerations represent 58% of all agglomerations in the territory of the *Arverni*, in a space representing only 15% of its area. Of course, this imbalance is partly attributable to the fact that the flat and hilly areas have been investigated with greater intensity than the mountainous districts.

37 Baret 2016.

38 Sidonius Apollinaris, *Carmen* 24; Gregory of Tours, *De gloria martyrum* 2.24–25.

39 Dacko 2016.

40 Fournier 1962. Cf. Gregory of Tours, *Liber de passione et virtutibus sancti Juliani* 16–17.

41 Dousteysier 2007; 2009; Bet et al. 2014.

Along the same road, 7.5 km farther to the north, a second agglomeration has recently been recognised in the Blanède Plain, in the commune of Le Broc [27], at a distance of 200 m from an inscriptionless milestone.<sup>42</sup> This agglomeration had a *fanum* whose *peribolos* is one of the largest in Gaul. Moving another 6 km to the north, the Merovingian *vicus* of *Iciodorensis*,<sup>43</sup> present-day Issoire [26], has yielded a few traces of Early-Imperial occupation but they are not sufficient to permit the identification of an agglomeration.<sup>44</sup>

The construction phases of this medium-distance road axis are still poorly understood, particularly because of the small number of stratigraphical observations. Any epigraphic data that might be associated with it are also largely lacking, as one of the two milestones that have been found along its trajectory is late, while the other has no inscription.<sup>45</sup>

The area to the north of the Clermont Basin and the Grande Limagne Plain appears to have been characterised by a very different sort of organisation of its network of agglomerations (Fig. 5.1). While the agglomerations in the southern part of the Allier Valley are aligned along a main axis, constrained by the relative narrowness of the valley, the fairly level relief of the plain to the north is much less restrictive. This geomorphological contrast is reflected in a different spacing of agglomerations, most of which are situated at crossroads on major axes, in particular those linking the chief towns of the neighbouring cities.

Among the agglomerations in the northern plain, Vichy [5] has been identified with the *Aquae Calidae* of the Peutinger Map. It was situated 46 km north of Clermont [14], about the same distance that separated the latter city from the agglomeration of Charbonnier-les-Mines [28] in the southern part of its territory (Fig. 5.1). In the Early-Imperial period Vichy, which succeeded the *oppidum* of Cusset, is thought to have occupied up to 50 hectares.<sup>46</sup> Therefore it can be assigned the second rank in the settlement hierarchy of the *civitas* of the *Arverni* (just behind *Augustonemetum*).

Despite the presence of a ford and a wooden bridge, one of whose piles has been dated to around CE 30,<sup>47</sup> Vichy's specific role as a road junction is still poorly understood, not least because archaeological observations relating to the peripheral areas to the northeast and east of the agglomeration are either

42 Dousteysier 2013; Baret 2013.

43 Gregory of Tours, *Liber in Gloria Confessorum* 29–30.

44 Mondanel 1982; Provost and Mennessier-Jouannet 1994.

45 Dacko 2016.

46 Corrocher 1981.

47 Troubat 2007.

old or very localised. The agglomeration itself unquestionably did undergo an important urban development. Not only did it boast several streets, the largest of which corresponds to the current axis of Rue Callou and Victoria Avenue, it was also endowed with sewers, aqueducts and lead pipes, not to mention perhaps two hypothetical *castella divisoria*. Information contained in the older documentation refers to columns, pilasters and capitals, suggesting the existence of monumental buildings.<sup>48</sup> A study of the metal artefacts carried out by Aurélie Ducreux strongly suggests the presence of elites in this agglomeration,<sup>49</sup> a conclusion that is supported by epigraphy.<sup>50</sup> A vignette on the Peutinger Map depicts a bath complex. Three hot springs were channelled and equipped with basins, and various objects relating to the therapeutic use of water, such as cups, medical equipment, and *ex-votos* have been discovered. In addition, there are many indications of diversified craft activities, including ceramic production, iron- and bronze-smelting, bronze and perhaps also silver smithing, woodwork, bone working, and stone work/masonry. The port district on the river, which remained in operation until the nineteenth century, has yielded ancient wooden piles that probably supported either a loading berth or a warehouse.<sup>51</sup> The reinterpretation and the mapping of the data will make it possible to characterise this important Gallo-Roman agglomeration with greater insight and to clarify its position in the regional network of agglomerations.<sup>52</sup>

Twenty kilometres to the north of Vichy, the agglomeration of Varennes-sur-Allier [3] succeeded a grouped settlement of the third and second century BCE. In Early-Imperial times this agglomeration occupied an area of about 25 hectares at which at least three roads, which were identified with the help of aerial photography, intersected (Fig. 5.1).<sup>53</sup> On the Peutinger Map it appears as *Vorogium*. Like Vichy, Varennes was endowed with a wooden bridge that allowed the Allier River to be crossed, of which several piles have been dated to the second and third century CE.<sup>54</sup> It also presents a wide variety of craft activities, such as the production of ceramics, iron and bronze metallurgy, bone-

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48 Augustin in progress.

49 Ducreux 2013.

50 See in particular *CIL* XIII, 1499 / *ILA* 86 (funerary stele of Lucius Fufius Equester, soldier of the 17th cohort of Lyon); *CIL* XIII, 1500 / *ILA* 87 (cippus of Sextus Cervius Maius, Roman citizen); *CIL* XIII, 1501 / *ILA* 88 (cippus of Caius Julius Cantussius [?], Roman citizen?).

51 Corrocher 1981: 98–99.

52 Augustin in progress.

53 Dacko 2016.

54 Bergeron and Blanchet 1990.

working and lime kilns.<sup>55</sup> The role of this agglomeration in the development of the surrounding countryside is suggested by the presence of six villas and by a high density of rural settlements. These indications show that Varennes-sur-Allier took its place as a second centre of development in the area to the north of the Allier Valley, alongside Vichy.

It should be noted that evidence of the manufacture of ceramics has also been detected in other agglomerations in this part of the *civitas* of the *Arverni*, for instance, in Toulon-sur-Allier [1], 20 km north of Varennes. The discovery of remains of wharves on the banks of the Allier and the Loire has been linked to the marketing of ceramics produced in this area. A little upstream from Vichy, in Bellerive-sur-Allier (Terre-Franche), the remains of a landing stage and sherds of *terra sigillata* have been spotted in the bed of the Allier.<sup>56</sup> According to L. de Féraud and H. Vertet, the boats laden with *sigillata* that came from Lezoux [17] and Vichy [5] and passed in front of the workshops of Toulon-sur-Allier farther north [1], could discharge some of their production here.<sup>57</sup> Near the workshop of Coulanges, which was located on a low terrace of the Loire, a deposit of vases and the foundations of sheds have been detected at the river's edge. These traces have been interpreted as pointing to the existence of a loading berth for ceramic products.<sup>58</sup>

In the northern part of the *civitas* of the *Arverni*, several medium-distance routes seem to have been improved in the first half of the second century CE.<sup>59</sup> The milestone of Biozat, which was erected in the years 120–121 CE, presumably along the 'Clermont-Vichy' axis, is contemporary with the date of felling of one piece of timber in the wooden bridge of Varennes-sur-Allier [3],<sup>60</sup> on the boundary between the territories of the *Arverni* and the *Bituriges*.<sup>61</sup> It is, however, difficult to know if these works bear witness to the construction of sections of this road or only to their repair.

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55 Lallemand 2005.

56 Vauthey and Vauthey 1986: 157.

57 De Féraud and Vertet 1986: 155.

58 Vertet 1980: 24.

59 Dacko 2016.

60 In 123 CE (Blondel et al. 2013: 42).

61 At the border between the city territories of the *Arverni* and the *Aedui*, the wooden bridge at Chassenard, on the Loire, has also yielded pieces of timber whose felling dates range between 2 BCE and CE137 (Steinmann et al. 2011: 64). The analysis of other samples could make it possible to specify whether the work carried out on this crossing structure was contemporaneous with work conducted near the agglomerations of Varennes-sur-Allier and Vichy.

#### 4 The Peripheral Uplands: 'Low-development Areas' and 'Integrated Margins'

Let us now turn to the mountains that cover the greater part of the *civitas* of the *Arverni*. These mountainous areas directly border the plains on all sides without any zone of transition, a geological consequence of tertiary collapse basins whose borders are set by steep fault lines. Although on the whole the peripheral upland areas were less dynamic than the Allier Valley and the Limagne Plain, they did provide the inhabitants of the latter areas with essential resources (Fig. 5.1). However, observations made to do with two well-researched sub-regions, namely Haute-Combraille and North-Eastern Cantal, caution us to be wary of making any generalisations.

##### 4.1 *The Region of Haute-Combraille*

The region of Haute-Combraille is crossed from east to west by a major road, the Lyon-Saintes branch of the Agrippan network, that linked *Augustonemetum*/Clermont with *Augustoritum*/Limoges, the chief town of the *Lemovices* (Fig. 5.3). Archaeological surveys and excavations have made it possible to reconstruct the trajectory followed by this road over a distance of about 50 km.<sup>62</sup> Near Gelles and Prondines, this route was joined by a second axis whose route between Gelles and Ussel is well established. The evidence at present available prevents us from following this road beyond Ussel but according to the historiographical tradition it ran all the way to Bordeaux, via Périgueux. These two road axes have similar morphological characteristics. Long sections of both routes consist of *agger* roadways, bearing witness to extensive earthworks and suggesting that their construction must have been very expensive. Examining the stratigraphy of the Agrippan Way, road-markers and the chronologies of the roadside settlement occupations suggest that its construction took place during the Augusto-Tiberian period. However, because the road between Clermont and Ussel has not yet been securely dated, the chronological relationship between the two roads cannot be established.

The surveys carried out by Guy Massounie in the area traversed by these roads have revealed an unexpectedly dense pattern of Roman occupation (Fig. 5.3).<sup>63</sup> No fewer than 126 sites and site indications have been identified, most of which can be dated to the Early Empire. A dozen of these sites seem to correspond to villas. More research is needed to identify the nature of most

62 Dacko 2016.

63 Massounie 2015.

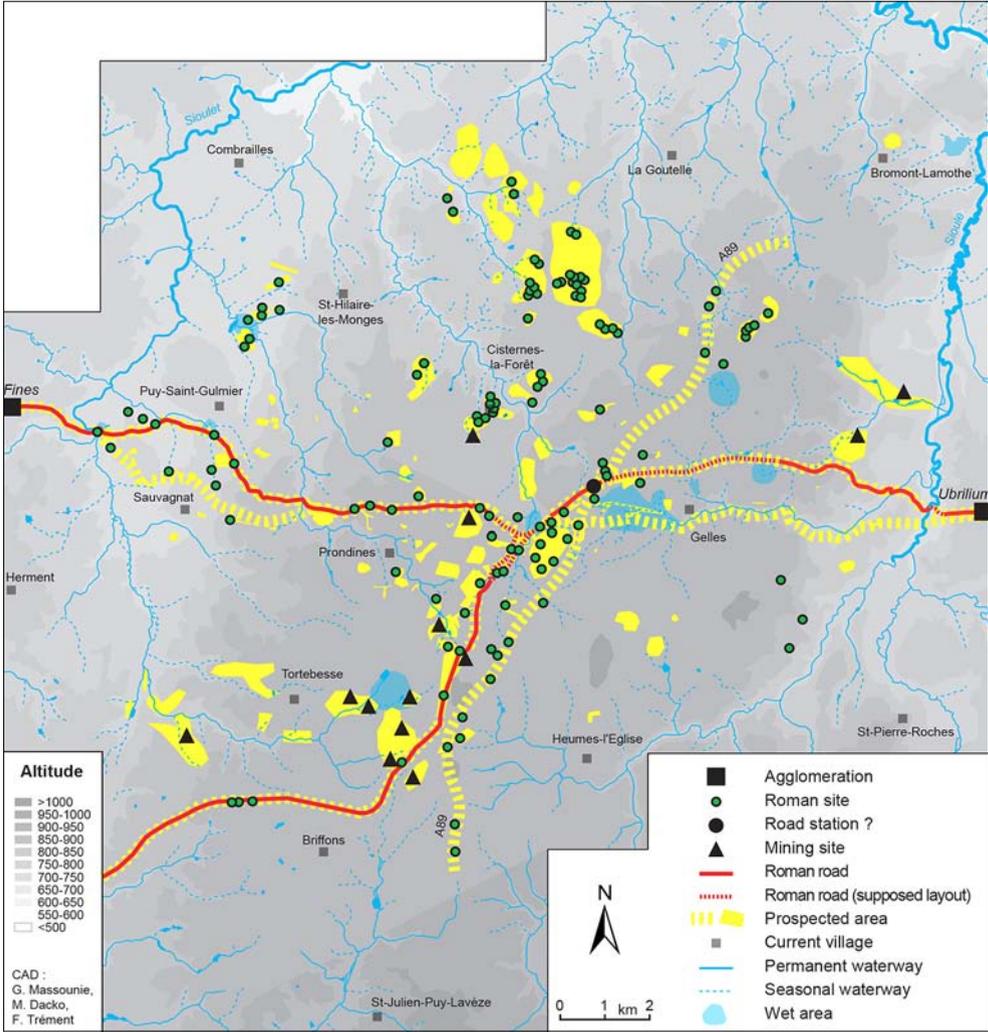


FIGURE 5.3 Haute-Combraille: the area of Gelles-Prondines in the Early Empire  
 CAD: G. MASSOUNIE, M. DACKO AND F. TRÉMENT

other sites, but archaeological evidence of agricultural and artisanal activities as well as some funerary material have been discovered.

Although Roman sites are present everywhere where conditions for doing research are advantageous, some areas show quite marked concentrations.<sup>64</sup> In the basin of La Narse-Pérol three Roman villas, situated 1 km apart from each

64 Massounie 2011.

other, were surrounded by a dozen other sites. Unfortunately, the nature of many of these smaller sites has yet to be established. In the zone of Éclache and Puy-Gilbert to the south (in the municipality of Prondines), three more villas and several other sites were scattered across an area of approximately one square kilometre that bordered several mining areas.<sup>65</sup> The palynological analyses carried out on the site of the Puy-Gilbert villa indicate an open landscape dominated by agro-pastoral activities.<sup>66</sup> A third example comes from the Puy du Faux-Les Imbauds, in the municipality of Cisternes-la-Forêt. On the southern and western slopes of this fertile hill, covering an area of approximately two square kilometres, more than 20 sites have so far been identified. Since no ancient roads have been detected and no agglomeration has been identified, we seem to be dealing with a 'poly-nuclear' pattern of settlement.

In some cases dense concentrations of archaeological material might indicate the presence of a grouped settlement. Less than 2 km north-east of the putative crossroads of the two roads connecting Clermont and Limoges, and Gelles and Ussel respectively, a roadside settlement along the Agrippan Way might have provided accommodation for travellers. So far no evidence pointing to the existence of an agglomeration has been detected near the crossroads itself but since the conditions for carrying out any investigations in this area are far from advantageous, we cannot say with any certainty that no agglomeration existed. On general grounds one would expect to find an agglomeration or a road station/staging-post in this sector, not only because such settlements have been found near many other crossroads, but also because roadside settlements are likely to have been fairly regularly spaced along the Agrippan Way between *Augustonemetum* and the agglomeration of Beauclair [9]. This road passed through several confirmed or potential agglomerations: from east to west, the road and worship complex of Col de Ceyssat [11],<sup>67</sup> the site of La Croix de Coheix (Mazaye), traditionally identified with *Ubrilium* [10] and probably identified by soundings conducted at Pré Marcel,<sup>68</sup> the hypothetical station of La Narse-Pérol referred to above, and finally the agglomeration of Beauclair [9] (Table 5.1).

The settlement of Beauclair that straddles the communes of Voingt and Giat is identified with the *Fines* on the Peutinger Map (Fig. 5.3).<sup>69</sup> It was occupied

65 Rebiscoul 2003; Rebiscoul et al. 2009; Trément 2016.

66 Prat 2006.

67 Trément ed. 2003; Trément 2013b.

68 Trément 1999.

69 Clémentçon and Ganne 2009.

TABLE 5.1 Distances between known and suspected road stations on the Agrippan Way west of *Augustonemetum* (CAD: F. Trément)

Current place name	Name on the Peutinger Table	Distance from previous road station (in kms—from east to west)
Clermont-Ferrand	<i>Augustonemetum</i>	—
Col de Ceysat		10,6
La Croix de Coheix	<i>Ubrilium</i>	8
La Narse / Pérol		11,2
Beauclair	<i>Fines</i>	16

from the first century BCE to the fifth century CE. The road traverses the southern part of the agglomeration. Excavations and both surveys by air and on foot have revealed dwellings, a thermal building, two places of worship, two necropoleis as well as yielding indications of diversified craft activities. It is worth noting that this agglomeration, which is about 40 hectares in extent, is located about 45 km west of the chief town. Approximately the same distance separates *Augustonemetum* from two other agglomerations with a similar surface area: Charbonnier-les-Mines [28] and Vichy [5].

Hence it appears that the construction of the Agrippan Way played an important role in the opening up and development of this upland area in the western part of the territory of the *Arverni*. This leads to the assumption that, in addition to agriculture, other resources were exploited. These probably included animal husbandry, timber production, stone quarrying and working and the extraction of minerals. As in the Limousin, the extraction of gold seems to have been interrupted at the time of the Roman conquest,<sup>70</sup> but silver lodes continued to be exploited in various places, particularly in the Sioule Valley<sup>71</sup> and in the Blot-l'Église area, in which a mining agglomeration [7] is currently being excavated.<sup>72</sup>

#### 4.2 North-Eastern Cantal

Another part of the peripheral uplands for which large amounts of information are available is the North-Eastern Cantal (Fig. 5.4). Marion Dacko has shown

<sup>70</sup> Trément 2016.

<sup>71</sup> Marconnet 2000; 2001.

<sup>72</sup> Delhoofs 2012; Delhoofs ed. 2013; Delhoofs et al. 2016.

that the old hypotheses about the trajects followed by Roman roads in this area are not based on valid archaeological data, but without being able to propose any alternative routes.<sup>73</sup> So far the existence of two ancient routes linking the *civitas* of the *Arverni* to the southern territories of the Massif Central have been proposed in the scholarly literature. The first of these, variously referred to as the 'Brioude-Massiac-Figeac road', the *via Terrana*, or the *via Celtica*, is supposed to have connected the ancient agglomeration of Brioude to the territory of the *Cadurci*. The second one, the 'Clermont-Javols road', supposedly a stretch of the 'Régordane Way', was believed to have connected the *civitas* of the *Arverni* with that of the *Gabali* and its chief town, *Anderitum*/Javols, via the valley of the Alagnon and the Monts de la Margeride.<sup>74</sup> Recent surveys have made it possible to locate the sites referred to in old publications relating to these roads and to map them. The data currently available do not support the view that these two axes of communication were of ancient origin. Nor do they permit us to establish the trajectories they followed through the Brivadois area and the Alagnon Valley. We are therefore reduced to mapping ancient agglomerations that cannot be connected to any road network. Future research might help us to set this unsatisfactory state of affairs to rights.

The work carried out by Maxime Calbris<sup>75</sup> for a PhD thesis argues for a downward revision of the number of agglomerations envisaged in the past by Alphonse Vinatié (Fig. 5.4).<sup>76</sup> Earlier hypotheses regarding the existence of agglomerations at Molompize, La Chapelle-Laurent, Saint-Poncy and Montchamp were based solely on their proximity to supposed Roman roads,<sup>77</sup> but must be rejected because there is not enough archaeological data, such as tiles, ceramics or building materials that can be linked to hypocausts, to support them.<sup>78</sup>

After a critical revision of the data set, the existence of three potential agglomerations can indeed be acknowledged.

In Massiac [36], the hypothesis of a small grouped settlement occupied at the beginning of the Early Empire is supported by archaeological material to which radiocarbon dating has assigned the period between the first century BCE and the second century CE. The occupation of this site can be linked to the exploitation of the Mine des Anglais that is situated below it, c. 400 m

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73 Dacko 2016.

74 Vinatié and Orceyre 1992; Vinatié 1995.

75 Calbris in progress.

76 Vinatié 1995; 2002.

77 Provost and Vallat 1996.

78 Baret 2015.

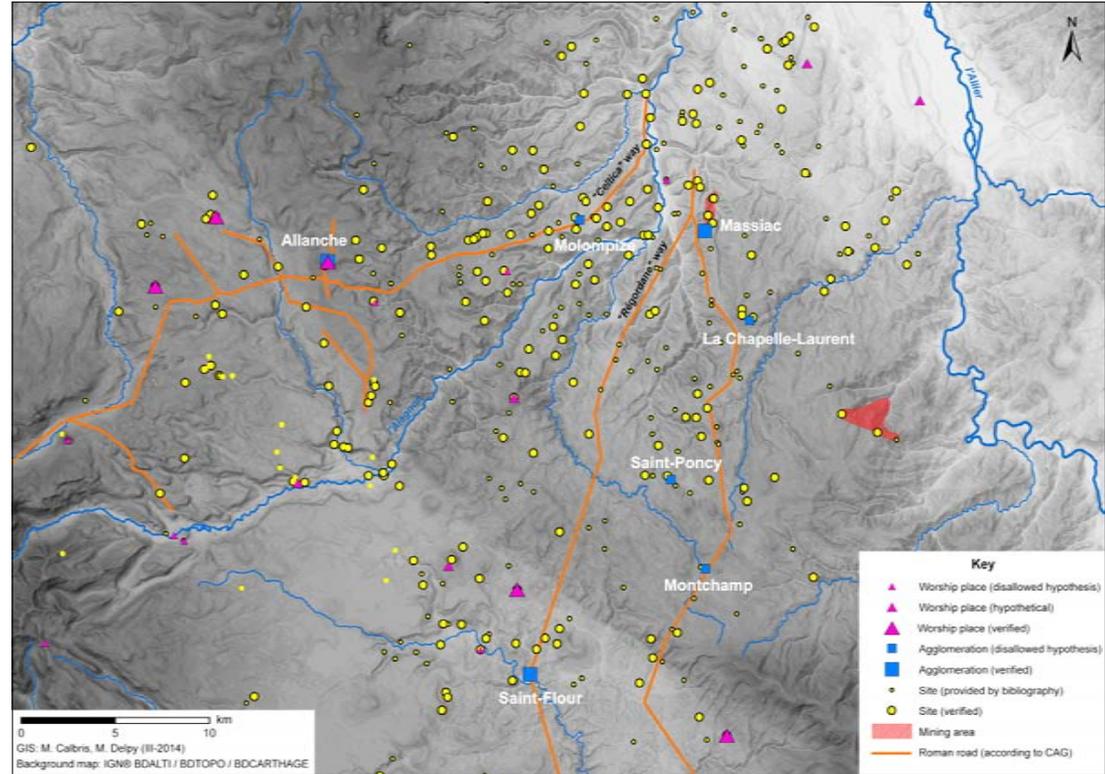


FIGURE 5.4 Northeastern Cantal: updated version of the *Carte archéologique de la Gaule* (Provost and Valat 1996) and *Patriarche* (2013) for the Roman period  
 CAD: M. CALBRIS AND M. DELPY AFTER MITTON 2007

to the north.<sup>79</sup> To judge from the description provided by the excavators, the hypocaust structure that was found near the mine in the late 1970s belonged to a private dwelling rather than to an ore smeltery.<sup>80</sup> Could this have been the house of the person in charge of the mine, while the houses of the miners would have been relegated to the top of the hill, south of the extraction zone?

In Saint-Flour [37], there are various indications suggesting the existence in Roman times of an agglomeration at the foot of the medieval village in the Bel Air district. During the construction of a housing estate at the end of the 1960s, evidence of ancient buildings was discovered. These traces cover an area of approximately 3 hectares. During the construction of the railway at the end of the nineteenth century, a necropolis was discovered in the area below this site.<sup>81</sup> The size of the occupied area as a whole can be estimated as a little more than 7 hectares.

A third agglomeration has been identified in Allanche [35], at an altitude of 1,250 m. Surveys on foot conducted in 2015 and 2016 have revealed abundant and diversified artefacts over an area of at least 20 hectares. More indications of metallurgical activity have been found to the east of this zone, and traces of a funerary space have been detected to the south.<sup>82</sup> The occupation of this agglomeration seems to have commenced at the beginning of the Augustan period and to have ended in the third century. The existence of a place of worship, a possibility aired in earlier publications,<sup>83</sup> has been confirmed by geophysical surveys carried out in 2016. These investigations revealed a rectangular *fanum* that was surrounded by a *peribolos* equipped with a gallery.<sup>84</sup>

During the Roman period, the area of the North-Eastern Cantal was also structured by villas and sanctuaries. Examples include the villa of Massiac, which was occupied between the first and fourth centuries CE, and the sanctuary of Landeyrat, at which recent systematic surveys have revealed that the site visible from aerial photography extended over an area of about 8 hectares.<sup>85</sup> Unfortunately, we do not know the exact location of the necropolis discovered in 1904. At this stage, it remains unclear whether any agglomeration existed near this sanctuary.

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79 This site used to be called 'La Minayre' but was renamed after the BRGM's borings in 1968 (Vialaron 1999: 70).

80 Vinatié 1995.

81 Delort 1881: 152–153 and 181–182; Vinatié and Maigne 1999; Calbris 2014; Baret 2015.

82 Vinatié 1991; Vinatié and Baillargeat-Delbos 2002.

83 Vinatié and Baillargeat-Delbos 2002.

84 Calbris in progress.

85 Ibid.

The patchiness of the archaeological record makes it difficult to formulate any sound hypotheses about the dynamics of regional development in the North-Eastern Cantal under the Early Empire. The economy of the region was probably based on agro-pastoralism and on the exploitation of wood, silver and lead.<sup>86</sup> As in Haute-Combraille, the current state of knowledge suggests a development essentially based on a network of rural settlements and small agglomerations that displayed at least some 'urban' features.<sup>87</sup> Acting as poles for the mountainous zones, in areas in which there were no large villas, these agglomerations probably served as commercial and administrative foci. Future research is expected to shed more light on the road network of this region and on the role of these agglomerations as centres of production and exchange.

## 5 Conclusion

The foregoing sections have highlighted the importance of four factors that seem to have strongly influenced the organisation of settlement in the *civitas* of the *Arverni* during the Early Empire: topography, available resources, the density of the road network and the distances between the chief town, small town-like places, simple agglomerations and villages. Furthermore, there are strong reasons to think that the situation which had been inherited from the pre-Roman period was an important 'generator of dynamics'. In both the Clermont Basin and in the area of Vichy, the presence of important sites at the end of the Iron Age lay at the base of a development that expanded after the Roman conquest. However, it should be emphasised that the long-term effects of 'cumulative causation'—the 'cumulative effect' or 'multiplier effect' identified by Gunnar Myrdal that inspired John Friedmann—did not happen without major re-arrangements in the local and regional power structures.<sup>88</sup> As we have seen, incorporation into the Roman Empire triggered displacements of political and economic power from *oppida* towards a central town or to other town-like agglomerations. These spatial reconfigurations could be interpreted as adaptations to the new political and socio-economic conditions of the Early-Imperial period. In the Clermont Basin, the complex evolution of the various central places inherited from the Iron Age seems to exhibit a process of competition and subsequent rebalancing in favour of the new chief town. After

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86 Delpy in progress.

87 Trément et al. 2014.

88 Myrdal 1957.

the Roman conquest, *Augustonemetum* rapidly became a major centre of the province of *Aquitania*, to the detriment of various existing settlements, such as *Gergovia* and *Gondole* whose development was inhibited by their proximity to the central town.

The existence of a causal connection between proximity to the *civitas* capital and opportunities for development is confirmed by the identification of three large agglomerations that were located approximately equidistant from the chief town. These three agglomerations are Vichy [5], that was situated 46 km north of *Augustonemetum*, Beauclair [9], that was situated 45 km to the west, and Charbonnier-les-Mines [28], that was located 42 km to the south. The size of the occupied areas of these three centres varies between 35 and 50 hectares, making them the largest agglomerations in the territory after the chief town and the old *oppida* of the Clermont Basin. The growth of these agglomerations seems to reflect their remoteness from the major development area in the Limagne plain. The existence of these large centres suggests that they catered to a demand for various services in the peripheral districts of the territory.

While these spatial patterns do tally with the predictions of the 'core/periphery' model, it is impossible to assess the degree of economic dependence of these second-level settlements on the central town. Moreover, some important questions regarding the role of second-level towns and other agglomerations in structuring the territory and facilitating or stimulating economic development still remain unanswered. On a local level, town-like agglomerations must have functioned as poles of organisation for the population of the surrounding district and as local market centres. However, it is difficult to establish whether or not these places served as market centres for a wider region. A regional role can safely be assumed for towns such as Vichy [5] and Varennes-sur-Allier [3], which were located on the banks of the Allier River, at crossroads linking the territories of the *Arverni*, *Bituriges Cubi*, *Aedui* and *Segusiavi*, and at the heart of a pottery production area whose distribution was quite obviously not confined to small areas. These towns, which were situated at a distance of approximately 50 km from *Augustonemetum*, were unquestionably important development poles for the northernmost parts of the *civitas* territory.

A ceramographic study conducted by Jérôme Trescarte has already shed some additional light on regional economic dynamics.<sup>89</sup> In the lower part of the Allier Valley and its alluvial plain, the main centres of power and population were distributed along a north-south axis during the final La Tène period,

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89 Trescarte 2013.

and it was also along this axis that a well-organised system of ceramic production developed from the middle of the first century BCE. From the Augustustan period, the axes that connected the new chief towns of the *civitates* (*Forum Segusiavorum*, *Augustonemetum*, *Augustoritum*) to the two provincial capitals, Lyon for *Gallia Lugdunensis* and Saintes for *Gallia Aquitania*, grew in importance, perhaps somewhat eclipsing the natural north-south axes constituted by the valleys of the Allier and the Loire. In the centre of the territory of the *civitas* of the *Arverni*, the Clermont Basin and the Grande Limagne Plain were crossed not only by the new east-west road linking Lyon and Saintes (the 'Agrippan Way'), but also by the north-south axis constituted by the Allier River and the terrestrial route that ran parallel to it (the '*Cessero-Augustonemetum-Avaricum* Way'). The new land routes provided the workshops of the Allier Valley with new markets, particularly in the direction of Saintes and Bordeaux to the west, and the capital of *Lugdunensis* and the Rhône Valley to the east. They also facilitated the exchange of technology, expertise and specialist craftsmen between workshops that could sometimes be separated by large distances.

In the second half of the first century CE, the adoption of new technical, morphological and aesthetic standards resulted in the manufacture of new types of tableware that were clearly Roman in appearance. These new ceramics were produced on a much larger scale than before. The new workshops that were established in this period, especially those producing C mode *sigillata*, seem to have been geared towards production for export to a much higher degree than those of earlier decades. Moving away from the main towns, these workshops developed in the immediate vicinity of major communication routes in order to optimise the transportation of their products along both the north-south and east-west axes. These new centres of productions required high quality raw materials, enormous amounts of firewood and a large and skilled workforce.

Examples of workshops that benefited from their proximity to the new land routes include Feurs, Courpière [23] and Sermentizon on the Agrippan Way, as well as those of the north-eastern part of the *Arverni* territory. Most of these workshops were *ex nihilo* creations. The emergence of workshops producing *terra sigillata* and other types of ceramics along the Allier, the Loire and their respective tributaries (Coulanges, Lubié, Saint-Pourçain-sur-Besbre, Saligny-sur-Roudon, Saint-Léger-sur-Vouzance/Saint-Léger-des-Bruyères, Thiel-sur-Acolin, Bourbon-Lancy) can be linked to the navigability of the main rivers that allowed a diffusion of their products in the direction of northern and western Gaul. The workshops belonging to the latter category were also located near major land routes, but outside the region dominated by the large production centre of Lezoux and its secondary workshops. The creation of these new work-

shops seems to have been a predominant feature of the early second century CE and can be understood as a way of optimising the diffusion of their products.

Therefore the inevitable conclusion must be that the ‘frontier zone’ between the territories of the *Arverni* and the *Aedui*, ideally located near north-south axes and roads running from east to west, must have emerged as a zone of new development. In the second half of the first century BCE and the early first century CE, the heart of the territory of the *Arverni* and the agglomerations of the Allier Valley had been the primary markets of craftsmen and traders, but then the situation changed. From the second half of the first century CE, the ceramics produced in this frontier zone began to be distributed over long distances, with the population of the large agglomerations of the region itself no longer the main outlets. These local markets were perhaps also supplied by the workshops located in the immediate vicinity of the main population centres that also began to produce mode C *sigillata* in this period.

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