

Christian Rollinger, **Amicitia sanctissime colenda. Freundschaft und soziale Netzwerke in der Späten Republik**. Verlag Antike, Berlin 2014. 567 pages.

›Amicitia sanctissime colenda‹ originated from the author's doctoral dissertation submitted at the University of Trier in 2013. In most respects, it is still very much a German-style doctoral dissertation, with its typical merits and flaws. It offers a wealth of data and ready-at-hand interpretations to work with, but the discussion is often needlessly long-winding and detailed.

The author's objective is to offer a new perspective on the role of friendship in the Late Roman Republic by using formal Social Network Analysis (SNA) to analyse how the rules and practices of amicitia affected the structure of social networks. This in turn helps to explain how political power was gained and how it was exercised. Given the available source data the study inevitably remains limited to Roman elite networks.

Rollinger enjoys a reputation as one of the new SNA-practitioners in ancient history; a small but growing group of young scholars who actively use digital tools and software to process primary source data into mathematical and graphic models susceptible to formal network analysis. It is still too early to evaluate the contribution of this approach to ancient history research, but, at the very least, it has the merit of facilitating cross-cultural and cross-epochal comparisons, and of visualising assumptions regarding the structure of Roman social networks.

The author familiarized himself with SNA-methodology when writing his M. A. dissertation ›Solvendi sunt nummi. Die Schuldenkultur der späten Römischen Republik im Spiegel der Schriften Ciceros‹, which was subsequently (2009) published in the framework of the Rhineland-Palatinate's Landesexzellenzcluster ›Gesellschaftliche Abhängigkeiten und soziale Netzwerke‹. Social Network Analysis took up only a small part of that study, but it attracted critical comments with which R. himself now concurs (p. 380 s.). ›Solvendi nummi‹ could not capture social elite networks because it relied only on financial interactions to map and analyse elite social networks in Ciceronian Rome. This time, therefore, the author takes into account the full spectrum of exchanges between amici – both material and immaterial.

Rollinger is very familiar with the technicalities of Social Network Analysis, and the time-consuming process of encoding data in formats susceptible to importation in network analyses software, in this case UCINET. However, he is also very aware of the limitations of this technique. His interpretations are cautious and his ›caveat lector‹ warnings numerous.

After a brief introduction (p. 9–16) the author arranges his study in three parts of unequal length. The first offers an analysis of the cultural and moral framework regulating amicitia (p. 17–132). Readers who are familiar with the subject can easily skip this. Those who are not, however, will find an excellent introduction to the subject.

The second part – ›Die heilige Pflicht der Freundschaft‹ – is by far the longest (p. 133–352). It systematically analyses the material and symbolic practices of amicitia. It is subdivided in four chapters on (1) symbolic communications through salutationes (morning ›social calls‹ by social dependents and lesser ›friends‹) and convivia (›banquets‹); (2) the exchange of letters; (3) letters of recommendation; and (4) various forms of assistance through (a) offices in the staffs of provincial or military commanders, (b) defence in court (legal patronage), and (c) material assistance via loans and sureties, and dowries and legacies (but dowries are dismissed in one page because they are nearly undocumented in Cicero's letters). The author provides a detailed overview of the symbolic and material content of interaction between friends. He shows how amicitia pervaded Roman elite society, and how young Romans were imbued with the ethics of amicitia and the

duties that came with it. In Bourdieusian terms (not used by Rollinger) Romans interiorised the ethos of amicitia into their habitus. Mos maiorum legitimised the duties of amicitia, but internalised cultural constraints were not what most guaranteed respect for the demands of amicitia. Rather, informal social sanctions enforced moral expectations. This enforcement structure was effective because there was a wide consensus that social positions depended on respect for the rules of amicitia. In his third part, Rollinger shows that this was ›objectively‹ true because of the structure and properties of Roman social networks. Expressions of affection were a part of the ethos of friendship, and they were instrumentalised both as a way to emphasize the principle equality between amici and to justify that favours and gifts were expected (cf. p. 415–417: ›Emotionalität als Bestandteil des praktischen Instrumentariums‹).

The second part is very thorough and convincing, but also very traditional in its approach and interpretations. Rollinger does an excellent job in showing how tradition, ethos and instrumentality were interconnected in Roman amicitia. I am quite convinced by the author's arguments, but feel more confirmed in my earlier views on amicitia, than surprised, so I do not feel that I have learned much that is new.

The third part – ›Das Oberschichtennetzwerk‹ – (finally) turns to the elite network which the author set out to study. The aim is to reconstruct a ›Gesamtnetzwerk der römischen Oberschicht der späten Republik‹ (p. 381) using network analysis to study its structure and characteristics in order to achieve a better understanding of aristocratic society in the last decades of the Republic (p. 382). This is the most innovative part, but surprisingly also the shortest and least elaborated. Thirty-eight of its fifty-eight pages (p. 353–411) are a technical introduction to the methodology of Social Network Analysis. The remaining twenty-odd pages discuss the graphs generated by the software program (UCINET) used to analyse the codified data.

The book closes with a general conclusion (p. 412–434) that summarises its main research results, followed by the bibliography, two long appendices presenting the codified prosopographical data (p. 491–528) and the generated graphs (p. 529–552), and excellent indices (p. 553–576).

There are few typos (I noticed ›hominum‹ instead of ›hominem‹ on p. 104), but the print quality of the graphs is dreadful. In many it is simply impossible to read the names of the agents making up the nodes.

Let us now look more closely to the book's most original part and its methodological and theoretical basis. The network, as reconstructed by Rollinger, has an unrealistically low density (0,7 percent, p. 404), due to the very fragmentary empirical data that it builds upon. There can be no doubt that the real historical network between the documented agents had a much higher density than this, but how much higher? How many nodes and ties are we missing merely be-

cause they are not documented? The author is acutely aware of this problem (p. 393); a lot of ties are simply not documented, so the concentration of ties on a small number of nodes (›hubs‹) is exaggerated. Thus, for obvious reasons Cicero ranks very high in degree centrality (i. e. the number of recorded links). The BonPurNeg Power Measures show that, in historical reality, Cicero had only a very relative importance in the reconstructed network. This is hardly surprising. But how should we interpret the high BonPurNeg measure for Lucullus (0,201)? Taken at face value, it would suggest that Lucullus was highly dependent on other agents in the recorded network. But this may simply be an effect of Cicero's connections being overrepresented, making the BonPurNeg for Lucullus irrelevant. Or is it because Lucullus really did not have a significant influence in the network documented here? And if the latter is so, may we conclude from that that Lucullus had become an isolated figure in these years or vice versa, that Cicero never really succeeded in pushing through in the network clusters where Lucullus thrived? Relying on network analyses provides no way out of this conundrum: »weitere Aussagen oder Untersuchungsverfahren lassen sich [...] nicht sinnvoll demonstrieren« (p. 396).

Significantly, and reassuringly, however, Rollinger finds that the structure of the network does not change when we take out Cicero. A small number of agents continue to dominate the structure of the network. So, while we cannot say much about individual nodes, some general characteristics of the network do stand out. These allow Rollinger to conclude that the late republican Roman elite formed a robust small-world, scale free network based on *amicitia*, rather than on family and *familiae*. Such networks are held together by a relatively limited number of ›hubs‹ that (directly or indirectly) connect all nodes in the network. They are highly robust against random damage (i. e. random nodes disappearing from the network). Thus, despite the havoc that the Social and Civil wars of the eighties had wrought, the Roman elite community was not disintegrating. *Amicitia* was an integrating force, thanks to the characteristics of the network structures that its code of conduct produced. This is no doubt the book's main contribution. Political strife, opposing factions, even bitter feuds certainly existed, but the elite community was not inherently unstable. This will spark debate, because it (rightly I think) moves away from recent trends to emphasize institutions and popular politics, and revalues the rich heritage of prosopographical research that ancient historians have at their disposal.

Conversely, however, the scale-free properties of the elite network made it vulnerable to targeted damages that destroyed central hubs. The civil wars of the forties and thirties broke the structural backbone of the republican elite, replaced old hubs with a small number of new ones and eventually created a super-hub in the person of the first emperor Augustus.

Rollinger has not attempted to analyse the Augustan aristocracy, but hypothesises that the structure of the Augustan elite network was very different. He suspects it was a ›winner-takes-all-network‹. Such networks are not scale free, and remain stable only for as long as the central hub exists. Brokers occupy secondary positions, but their influence derives solely from the central hub. In Augustan (and later imperial) society, brokers were often not members of the senatorial or equestrian elite. The implication would be that *amicitia* became less important for the stability of elite networks, leaving room instead for new markets (for instance for legal services). Obviously, this hypothesis about imperial elite networks needs a more empirical basis, for which Rollinger points the reader to two ongoing projects studying imperial elite networks by Nathalie Bissen and Jan Wolkenhauer (p. 429).

These are all very interesting hypotheses and Rollinger's own conclusion regarding the structure of elite networks in Ciceronian times seems (to me) convincing. However, it could easily have been argued in the form of a scholarly article, with the tables and graphs made available as datasets in an online repository. Being the most innovative part of a long scholarly monograph (rather than as a PhD dissertation), Rollinger's analysis has weaknesses.

First of all, the Roman ›elite network‹ is defined (for the authors's purposes) as being composed only of senators and knights (p. 382), others have been included only if they were part of a triadic exchange in which the other agents were senators or knights (p. 392). This yields a total of 490 persons (listed in a prosopographical table). This limitation is unfortunate and seems rather inspired by time constraints than intrinsic arguments. Methodologically, it would have made more sense to include every person connected to at least one senator or knight. It implies for instance that senatorial or equestrian slaves and freedmen are only included when they can be linked in some way to an exchange involving their master or patron and another senator or knight. The somewhat worrying implication of that, however, is that the bulk of the (extended) *familia* networks of Romans is excluded from the study. Similarly, members from local elites are largely excluded.

Secondly, for reasons that are unclear to me Rollinger has stopped short of using the full power of Social Network Analysis techniques and computer programs. The main missing element in this respect is the aspect of time. Rollinger's analysis is ›flat‹. Diachronic analysis is avoided. Yet, all standard Social Network Analysis programs allow dynamic modelling. In this case, it should have been easy to see how the documented network evolves over a period of some decades, and measure the effects of, for instance, Cicero's banishment and return, Crassus' defeat, the Civil War, Pompey's defeat, the murder of Caesar, and so forth. It would be very interesting, for instance, to see whether and to what extent the ›hub‹ Caesar was replaced by his adopted son Octavian or by Marc Ant-

ony. After all, structural stability does not imply that a network is static.

A fundamental problem, often pointed out by the author but not solved (and probably impossible to solve), is that the data we have are heavily biased towards links that interested Cicero. However, this is also an opportunity. We have very incomplete rendering of late republican social elite networks, but we have a fairly complete rendering of Cicero's ego-network. Why doesn't the author attempt to analyse this network? Social Network theory has a specific methodology developed for the analysis of ego-networks. While the properties of such networks cannot be generalised to the larger social network in which an ego-network is embedded, they do tell us a lot about the kind of social context in which that particular ego was embedded. As far as I know, no formal ego-centric analysis of Cicero's network has ever been attempted. Ego-network analysis could have helped to correct or at least detect some of the biases present in the Social Network metrics and graphs discussed in this book. Rollinger has collected most of the necessary data. It should be easy to run them through the computer. Combining Cicero's correspondence with Atticus and Cornelius Nepos' biography of the man would, I suspect, have made it possible even to reconstruct Atticus' ego-network.

Another missing dimension is the lack of links based on ascriptive qualities, such as kinship. Interaction between (close) kin in Roman society shared many characteristics with that between amici, but was governed by moral expectations and obligations that derived from a different set of values (such as filial piety or fraternal solidarity), and was constrained by non-voluntary ties. What would happen to the graphs and metrics if we filter out family relations, such as that between Cicero and his brother? The question is important because it provides a way to measure the importance of amicitia as compared to kinship. I don't know the answer, but with the data collected and properly 'codified' (as the author calls it) the question could at least have been addressed.

The author has not attempted to differentiate between strength of ties (based on the number of officia exchanged between nodes) and multiplexity of ties (based on the diversity of officia exchanged), because the sources are too fragmentary to support such an attempt. This is certainly true for the criterion 'strength of ties', I am less convinced that it is true also for multiplexity, but won't argue the case – let us assume that Rollinger is right. Even so, both criteria are too important not to reflect upon, as they are directly related to the distribution of resources and entitlements in Roman society. To what extent was the allocation of and access to political and economic resources dependent on amicitia? The difference between the small-world or scale-free network of the late republican elites and the 'winner-takes-all' network of the Augustan aristocracy is surely a result of the concentration of resources

in the hands of one man and his ability to ignore expectations from 'friends'. Similarly, the central 'hubs' in the late republican network derive their position from their relative control over resources needed or coveted by others. I don't think one can reasonably argue (or that the author would argue) that the allocation of resources lying behind these configurations derives solely from the dynamics of the different social elite networks. Institutions and popular politics matter. The challenge for Rollinger's model is to understand how these three were interrelated. That question is not addressed, mainly (I assume) because Social Network Analysis is methodologically unable to provide meaningful answers. However, if formal SNA is to have a future in ancient history research it will (like any other methodology) need to find ways to connect to questionnaires that require a different methodology.

Too much of the discussion of the graphs concerns technicalities and definitions. For instance on page 400 where the author first defines the concept of 'clique', then that of 'k-plex', then that of 'k-cores', to end with the algorithm developed by Girvan and Newman to define group membership. Together these definitions take up more than half of the discussion of the graph showing the network of military functions. The historical conclusions are limited to noting the self-evident importance of Caesar, Pompey, Lucullus and Crassus.

Surprisingly, while much energy is devoted to explaining such technicalities, not much is done with network theories and models (briefly presented on p. 354–366). We hear almost nothing about the difference between (let alone relative importance of) weak ties and strong ties, or bonding and bridging social capital, or the societal consequences of different network structures. Intuitively (but perhaps wrongly), I would expect a dense network of weak ties within Roman elite society, linking dense clusters of strong ties based on familiae relations, and with 'bridges' to non-elite and local elite networks based on collective patronage over municipalities and collegia, and on (competing) amicitiae with businessmen. Again intuitively, I would expect to see 'primary star configurations', typical for patronage (see K. Verboven, *The economy of friends. Economic aspects of amicitia and patronage in the Late Republic* [Brussels 2002] 347), becoming more and more unstable as Roman elite networks became larger and institutional control (by the senate, magistrates, and law-courts) over privately owned or usurped resources diminished – eventually leading to failed state scenarios and civil war, and ultimately to the re-configuration of elite networks into the new 'Augustan aristocracy'. These are all hypotheses and I am not sure how much Social Network Analysis as a formal methodology can contribute to these debates given the quality and quantity of our data, but these are the issues that really matter: how does the structure and behaviour of social networks interact with formal institutions? What are the political and economic outcomes?

It isn't clear to me why the author has spent so many pages on his thorough but excessively traditional second part and so few on his much more original and challenging third part, or to the potential of using social network theory as a model and interpretative framework (rather than merely a technical method). A hopefully mistaken (?) belief that PhD dissertation should conform to tradition, perhaps? Rollinger is a highly talented historian, there should be no doubt on that. Now that he has passed his doctoral ›rite de passage‹, let us hope that he is ready to kick some ass and »rumores senum severiorum omnes unius aestimet assis«.

Gent

Koenraad Verboven