**Senior Editor Comments to Author:**I have now received the reviewers' reports and a recommendation from the Associate Editor who handled the review process. Copies of their reports are included below.  Based on their evaluations, I regret to inform you that we are unable to publish your paper in Methods in Ecology and Evolution.

**Associate Editor Comments to Author:**All three reviewers found the paper well-written and were positive about the creation of the MacaqueNet database. However, two reviewers expressed concerns about the suitability of the paper for Methods in Ecology and Evolution in its current form. The general theme of these comments was that improvements were needed to: highlight the potential value of this resource beyond primatology and behavioural research; better demonstrate the potential research opportunities provided; and provide greater technical detail related to the datasets collated (which I think may have led to some misunderstandings too) and data quality. These two reviewers have also provided some potentially helpful suggestions related to the database itself and the GitHub repository it is stored in that may be valuable to the authors.  
  
**Reviewer(s)' Comments to Author**:  
Reviewer: 1  
In this paper, the authors describe a new data initiative focused on standardizing, centralizing, and sharing a large number of datasets on macaque sociality called MacaqueNet. This paper is well-written, engaging, and represents an exciting new opportunity for comparative research within a well-studied taxa. I very much support the mission of this initiative, which is focused on compiling data, ensuring the best chances of comparability across datasets, and setting up fair and transparent data sharing policies. I have been wanting to start a similar initiative with another taxa, so it’s very exciting to see how the MacaqueNet group actually accomplished this.   
  
For me, there are three methodologically-exciting aspects to the manuscript: (1) it sets out how they have tried to make the data as searchable and comparable as possible (the website looks great!), which will enable a huge number of future projects, (2) they explain the history how the group came together and planned, which can be used as a model for people like me, who may want to try to accomplish similar initiatives with other taxa, and (3) they clearly explain their approach to data sharing and credit, which again can be used as a model for similar initiatives.  
  
My only very small comments were on the figures.  
  
Fig 1: can the authors add panel labels? Maybe (a) for the first phylogeny, (b) for the second, (c) for the number of datasets by social context, and (d) for network densities. I would also label the number of datasets by social context section for extra clarity. I think network density could be a little more clearly defined in the caption.  
  
Fig 2: The outlines of the map in Fig 2 are a bit hard to see on my screen – making them either a bit thicker or a bit darker might help.  
  
Fig 3: The text sizes in panels A and B are pretty small and might be hard to read in print version – can these be increased at all?  
  
Reviewer: 2  
I enjoyed reading the current manuscript as it is clear, concise and well-written. The approach presented in the manuscript has the potential to produce interesting insights into primate social behaviour. It is clear that hard work went into compiling this data-set, and I commend the authors on their commitment to open, transparent and reproducible research practices. I do, however, have some reservations as to the general appeal of such a resource to researchers outside of primatology and, as someone who does not work with the Macaque, I find it hard to think of research projects or questions that the data can answer that would be of core interest to researchers working with other (non-primate) species or on broader comparative work. For this reason, I believe that the manuscript would better fit in a more specialised journal focused on primates. Alongside this, I have feedback on the design and implementation of the workflow.   
  
Code and workflow  
  
It would have been great to be able to more easily access the workflow and codebase associated with the manuscript. As the manuscript has been published as a preprint, anonymisation seems unnecessary, and I followed the links from the preprint to access the code.  I then realised that there was a deanonymized link later on in the manuscript (sorry). Below, I outline some points of concern/feedback about the workflow and code found at <https://github.com/MacaqueNet>.  
  
• It’s great that there are some default testthat unit tests housed in the repository. It would be good practice to write some custom unit tests for some of the core features of the software to ensure that they also work correctly under different, relevant conditions.   
• There seem to be a number of .xlsx files housed in the repository. It is not good practice to store data as .xlsx in GitHub as git version control does not work correctly with these file types—it can only store the entire file, and cannot correctly track changes to individual elements. For this reason, it is best to store data in .csv or .txt format.   
  
Main manuscript  
• Surely the data-sets that were submitted were of varying quality. It would be good to note and document what types of quality control tests were done on these data, and whether there are any reservations about certain measures/data included in the relational database.   
• Figure 1 shows that in nearly evert species there are networks that have either a density of 0 (no ties were observed) or of 1 (100% of all possible ties were observed). It seems odd that this is observed. For instance, a density of 1 would suggest that 8 individuals in a group of size 8 where observed affiliating with one another at all periods of observation.  From reading the legend it seems a little misleading to refer to this point estimate as, as the proportion of dyads that have interacted at least once contains an inherent sampling bias and does not represent density as defined in network science and social network analysis. Density is typically defined as the number of observed ties divided by the number of possible ties given that there is more than one single point of observation, the number of times interactions could be observed must enter the equation. That is, if there is a group of 8 individuals that could have been observed with interacting with equal probability in 4 time periods, the number of possible interactions/ties would be (8-1)\*4. This is really important as there will no doubt be varying sampling strategies/time periods and not including sampling effort in the denominator prevents any meaningful comparison.   
• It’s important to also present the range in group size in Figure 1.   
  
Reviewer: 3  
The authors describe the creation of a database with (social) behavioral data from various species of macaques to investigate the adaptive functions, ontogeny, evolution and mechanistic underpinnings of social relationships. The authors describe why they believe that macaques are a promising genus to conduct comparative research on social behavior, how they proceeded to create this database, which projects they are planning to conduct using the included data, and which data they plan to include in the future.  
  
I had the impression to read a grant proposal (or the first report for a received grant) rather than a manuscript: the manuscript is all about how promising this database is but it didn’t provide results to validate its usefulness. For example, the authors write that ‘At the time of publication, four collaborative projects are using MacaqueNet data: 1) a project investigating the links between social diversity and social complexity; 2) a project exploring the socio-ecological drivers of variation in social relationships; 3) a project testing the impact of hierarchy steepness on rank-related benefits and 4) a project looking into predictors of intersexual dominance.’ (306 - 310). Yet, there are no preliminary results (or even explanations what, e.g., ‘link between social diversity and complexity' means) to illustrate how the database is usefulness to address these questions. Also, there is an entire section ‘The future potential of MacaqueNet’ (317), but as it is, basically everything in the manuscript seems to be best described as 'future potential'. Beyond scientific conclusions, some of the other activities also lack data to show their success of failure. For example, in lines 197 to 199, the authors write ‘We aimed to mitigate the inherent bias towards researchers from Europe and the US, and to facilitate the involvement of scientists from macaque-range nations and historically underrepresented research communities.’ Has it worked out? Or not?  
  
Also, one major limitation is the lack of data on ecology and cooperation. This is a bit odd as the authors seem to agree that ecology is crucial for behavioral evolution and mention ecological factors many times in the manuscript (e.g., the ‘pronounced variation in ecology and social structure...’ (332-333) among populations and species and that they want to ‘explicitly test the social and ecological drivers of this variation’ (335 - 336). With regard to cooperative behavior, the authors write that ‘a comprehensive understanding of social relationships necessitates data on both affiliative and agonistic social interactions. Both types of interactions play crucial but distinct roles in shaping the dynamics and complexity of social systems.’ (116 - 118) and, accordingly that ‘The core of the database consists of sociometric matrices representing the two primary axes of animal social structure: dyadic affiliative or agonistic behaviour between individuals, aggregated by study period (Fig 3A).’ (230 - 232). However, it’s hard for me to see how we can understand social relationships if we don't consider cooperative behaviors (e.g., agonistic coalitions, cooperative breeding, food sharing), which don't seem to be encompassed by affiliative and agonistic behaviors. This is in strong contrast to claims such as ‘MacaqueNet's potential to advance our understanding of social relationships extends beyond its current capability to explore their ultimate function and evolution.’ (318 - 319) And oddly, the authors don't even seem to plan to include such data in the future: ‘To expand the scope of the MacaqueNet database, efforts are underway to include additional data types such as life-history, morphological, endocrinological, and genetic/genomic data.’ (326 - 328) - but no data on ecology or cooperation.  
  
Furthermore, many of the included data sets come from captive, semi-free ranging, provisioned, and/or managed populations, which is crucial for the types of questions that can be addressed. However, I found the descriptions of the study populations rather incomplete. For example, the authors state that the data comes from ‘21 wild, 22 captive, and 18 free-ranging populations [...] at a total of 61 field sites, zoos, and research centres....’ (208). They even include a plot illustrating whether populations are wild, captive or free-ranging. But the definitions, which seem to very important here, are only given in the Glossary in the Supporting Material. Also, a brief description of the relevance of the type of ranging considering the aims of the database would have been helpful. Furthermore, the authors use descriptions such as ‘wild or naturalistic semi-free ranging settings’ where it is unclear what they mean with 'naturalistic'. Finally, from the glossary it becomes clear that information about whether populations are provisioned or not is included in the database as well. Since feeding competition is considered a major selection pressure on social behavior, and, thus, food availability highly relevant for questions about the adaptive functions of social relationships, I thought this information is perhaps even more important than whether they are captive, (semi-)free ranging or wild. And the same holds true for whether populations are managed (e.g., birth control or removal/integration of new individuals), which is crucial to know when asking ultimate questions about behavior.  
  
Finally, the description of the creation of the relational database in the main part of the manuscript is very basic (e.g., linking matrices of dyadic interactions to tables with information about individuals). I believe this would more interesting if some of the information from the supporting material would be included, for example: How is such a data base created in GitHub (vs. SQL)? And why is that even beneficial? How is data standardized in the package? What is the structure of the database? I was not even sure if the GitHub repository ensures data integrity, which is a major benefit of SQL databases. Presenting these parts in more detail, in combination with preliminary results of scientific studies that show the benefits of this database, may make this manuscript (in my opinion) more suitable for a journal such as MEE.  
  
Other Comments:  
- Why are macaques describe as ‘frugivorous’ if they also eat so many other things? Perhaps ‘omnivorous’ would be a more informative term.  
- 170 - 191: ‘Since then a body of research has leveraged macaque behavioural data, including comparative research across macaque species [many references], to greatly contribute to answering fundamental questions on the evolution, selective pressures and adaptive functions of social behaviour [many references]. Research on macaque behaviour and socio-ecology has also helped to ignite interest for subsequent investigations into other species. Research on kin biases [many references] and patterns of dominance and agonism [many references] are good examples of this.’ Without knowing the many cited references here, it appears to be impossible to understand how macaque research has contributed to science. Are there some good examples?  
- Fig 1:  I suggest splitting the network-density-dot-plot between affiliative and agonistic behaviors. Currently, there are many networks with a density of 0, which indicates that no dyadic interaction were observed during the study period. I think this would be pretty odd for affiliative interactions (including grooming, body contact, and spending time in close spatial proximity) but perhaps not for agonistic interactions. Or what is the explanation for these networks with a density of 0?  
- I was first confused how to look for the supplementary material until I realized that I had to go to the anonymized repositories. Perhaps, some of the more central parts, such as the Glossary or the database structure, could be included as files to download.