Cross-comparison of classical sources, explorer and scientific reports and maps in the search of an ancient city: The example of Raphana of the Decapolis

Luc Doyon based on reviews by Rocco Palermo and Francesca Mazzilli

A recommendation of:

Raphana of the Decapolis and its successor Arpha - The search for an eminent Greco-Roman City

Jens Kleb Figshare, 2022, 20550021 https://doi.org/10.6084/m9.figshare.20550021

Open Access

Recommendation

Establishing the precise location of ancient cities constitutes a challenging task that requires the implementation of multi-disciplinary approaches. In his manuscript entitled “Raphana of the Decapolis and its successor Arpha: The search of an eminent Greco-Roman city”, Kleb (2022) proposes a convincing argument building on in-depth research of classical literary sources, literature review of explorer accounts and scientific publications from the 19th and 20th century as well as analysis of old and new maps, aerial photographs, and satellite images. This research report clearly emphasizes the importance of undertaking systematic interdisciplinary work on the topic to mitigate the uncertainties associated with the identification of Raphana, the Decapolis city first mentioned by Pliny the Elder.

The Decapolis refers to a group of ten cities of Hellenistic traditions located on the eastern borders of the Roman Empire. This group of cities plays an important role in research that aims to contextualize the Judean and Galilean history and to investigate urban centers in which different local and Greco-Roman influences met (Lichtenberger, 2021). While the location of most of the Decapolis cities is known and is (or was) subjected to systematic archaeological investigations (e.g., Eisenberg and Kowalewska, 2022; Makhadmeh et al., 2020; Shiyab et al., 2019), the location of others remain speculative. This is the case of Raphana for which the precise location remains difficult to establish owing in part to numerous name changes, limited information on the city structure, architecture, and size, etc.

The research presented by Kleb (2022) has some merits, which is emphasized here, although the report is presented in an unusual format compared to traditional scientific articles, i.e., introduction, research background, methodology, results, and discussion. First, the extensive review of classical works allows the reader to gain a historical perspective on the change of names from Raepta/Raphana to Arpha/Arefa. The author argues these different names likely refer to a single location. Second, the author combs through an impressive literature from the 19th and 20th century and emphasize how some assumptions by explorers who visited the region were introduced in the scientific
literature and remained unchallenged. Finally, the author gathers a remarkable quantity of old and new maps of the Golan, el-Ledja and Hauran regions and compare them with multiple lines of evidence to hypothesize that the location of Raphana may lie near Ar-Rafi‘ah, also known as Bir Qassab, in the Ard el Fanah plain, a conclusion that now requires to be tested through fieldwork investigations.

References


Cite this recommendation as:

Conflict of interest:
The recommender in charge of the evaluation of the article and the reviewers declared that they have no conflict of interest (as defined in the code of conduct of PCI) with the authors or with the content of the article.

Reviews

Evaluation round #3
DOI or URL of the preprint: https://doi.org/10.6084/m9.figshare.20550021
Version of the preprint: v3

Author's Reply, 29 Oct 2022

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Dear Recommenders, dear Luc Doyon,
According to your recommendations, A) I have researched all rights again and asked about. In the area of bibliography 7, the "Declaration of fair use" has been attached for scientific literature and its publication.

I agree with your point B) that you noted, so that my comments and corrections to the reviewers' answers can also be published.

Regarding points C) and D), the work has now been proofread again by a professional native speaker office and refined accordingly, this was done earlier in August also. The scope of the work is significantly greater
than that of a normal article, but in the course of several years of research, this level of detail was recommended to me several times by the universities, at least for the initial publication on this topic. Certainly the paper is not in the identical style as other purely archaeological topics and articles, but I kindly ask you to note that after the above said, for a change of status quo in the area of the positioning of ancient sites, more details were requested, from several scientific quarters. Therefore, this amount of literature must been excerped and analyzed. On the other hand, the new research results unambiguous have to be documented. I am therefore firmly convinced that the importance of the research results presented here and the independent yet sequential character of the individual chapters of the work will be understandable for the reader and important for different areas.

with kind regards from Germany, Jens Kleb

**Decision by Luc Doyon, posted 14 Sep 2022**

Dear Mr Kleb,

I wish to thank you for submitting an updated version of your manuscript now entitled “Raphana of the Decapolis and its successor Arpha. The search of an eminent Greek-Roman (sic) City”. I acknowledge the significant changes you introduced to this manuscript. In its current format, the work presented provides a thorough literature review and a wealth of maps and illustrations that surely would be welcomed by the community of researchers interested in the topic.

Before formally accepting your manuscript, some final adjustments must be considered.

A) Given that the article would be available in open access, you must make sure that you detain the necessary copyrights for each image included in it. I am aware that the policy for Google Maps allows you to use their materials for academic papers. However, equivalent copyrights must be obtained by yourself for the all the other images. Citing the reference where the figure was initially published doesn’t act in lieu of reproduction rights. Both information must be provided. Please make sure all illustrations comply with this, even if the image in question is part of the public domain.

B) Should your paper be formally recommended to PCI Archaeology, all reviews and responses to reviewers will be made available. This is what makes PCI distinct from other venues. I understand that you wish me to remove your responses to some issues raised by Dr. Mazzilli, however this is not going to be possible as it would be going against the very foundation of PCI, which is to ensure a transparent review process. As mentioned in a previous exchange, disagreeing with a reviewer and challenging their views do not constitute a lack of respect. It is the very basis of modern science to challenge and revisit ideas; this process indeed helps us further advance our common knowledge.

C) Although I noticed some improvement in the English, there is still many instances where the text could be streamlined, where American and British English cooccur, and where there are mistakes (for instance, in the title, Greek-Roman should be changed either to Greco-Roman (American English) or Graeco-Roman (British). I understand you solicited the help of a native speaker. A more thorough editing would be welcomed. Should you decide to submit a new version of your manuscript, I would encourage you to limit the discourse to factual aspect. For instance, the references to your personal research experiences in the introduction and elsewhere are not necessarily adding weight to the research background as similar issues were likely encountered by other researchers as well.

D) Please review the manuscript formatting guidelines provided on the PCI Archaeology [https://archaeo.peercommunityin.org/help/guide_for_authors](https://archaeo.peercommunityin.org/help/guide_for_authors). We understand your manuscript format may be somewhat “untraditional” given the extensive literature review and the work done with maps, old and new, however, aligning as much as possible the structure of your manuscript to what is expected will facilitate understanding and may rid of unnecessary repetitions. In its present state, the abstract lacks concision. I encourage you to follow the structure suggested in the guidelines, i.e., 1) introduce the research background and question, 2) briefly describe the methods used in your research, 3) highlight the major
results, and, 4) discuss how your results contribute to answering the research question. Usually, the abstract length averages between 200-300 words.

PCI Archaeology will welcome a new version of your manuscript. When re-submitting, please provide, in addition to the updated draft, a copy of your manuscript with track changes. Failure to do so will only increase the evaluation process as it entails that I have to compare both documents in search of the changes you will make to it.

I remain available should you require further information.

Best regards,
Luc

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**Evaluation round #2**

DOI or URL of the preprint: [http://dx.doi.org/10.6084/m9.figshare.17705069](http://dx.doi.org/10.6084/m9.figshare.17705069)

Version of the preprint: v2

**Author's Reply, 23 Aug 2022**

Download author’s reply

Dear Mr. Doyon, dear reviewers,

thanks for your time in advance, please take a look at the attached replies, within the pdf file.

regards from Germany, Jens

**Decision by Luc Doyon, posted 09 Jun 2022**

Dear Dr Kleb,

I am happy to inform you that I have received the assessment of your revised manuscript by the two reviewers whom had suggested comments and modifications to your original submission. Although they appreciated the changes made to address some of the issues previously raised, others remain unresolved and would need to be dealt with prior to accepting your manuscript. As you will notice from their comments below, we would welcome a second revised version that is proofread/edited by a native English speaker. Furthermore, and most importantly given the topic of your manuscript, we would appreciate you taking into consideration both reviewers’ suggestions pertaining to the methodology, maps and other illustrations.

As you are aware, PCI Archaeology is committed in recommending high-quality manuscript. I strongly believe that thanks to the comments provided by the two reviewers, you will be able to make the necessary changes to improve your manuscript. I therefore invite you to submit a revised version at your earliest convenience. In order to facilitate the review process, I would ask you to provide along with your revised manuscript, a point-by-point response to the reviewers’ comments and a version of your manuscript with track changes.

I remain available should you require further information.

Best regards,
Luc Doyon
Reviewed by Rocco Palermo, 06 Jun 2022

Dear Dr Kleb,

I have read your revised manuscript and although I have found a lot of improvements, there is still something missing in terms of methodology and text appearance.

I struggle to understand why you did not use declassified - and available - images to investigate the forts' location, for example. Commercial satellite data, like Google Earth, are helpful, but for the purpose of a landscape archaeology approach to the identification of ancient places, perhaps a combination of both sources could add an even more interesting touch to the paper.

It seems to me that the English of the text has not been fully revised, as I see many sentences and expressions that can be adjusted. Please check also the use of capital letters for nouns (I guess you are from Germany and this of course is an unconscious thing :). 

I do not have anything else to comment on, but I strongly recommend a proper revision of the text and perhaps an extra page to compare satellite dataset evidence (this does not have to be a long comment or analysis, but it will certainly improve the quality of the paper).

Reviewed by Francesca Mazzilli, 25 Apr 2022

REVIEW: SECOND ROUND

Although the Author has followed some of the suggestions pointed out by both reviewers and improvements to the text are noticeable, further work is still required to reach an adequate level for publication. It is more about the structure than the content, which I find interesting worthwhile to be published after the following essential amends:

1. The text needs to be carefully edited and proofread. A lot of sentences are unclear. It is evident that the text has been translated from German to English as many words are in capital letters.
   - For instance, the following sentence is unclear:
     “It can be shown within the Analyses of Literature and Maps that, due to completely different interpretations and in spite of missing archaeological evidence, many hypothetical and even unreal locations were included in previous scientific literature.”
   - The second part of the article’s title does not make quite sense in English. “An eminent Greek-Roman City and the search on it.” You need to rephrase “search on it.”
   - What does it mean “Summary to chapter 3”? It is not correct in English, and I would not use this subheading; providing a summary per each subsection implies that you need to summarise a list of information which should not be in the actual discussion of the article (see the following point as an example)

2. Section 2. “Historical and geographical analysis” and Section 3. “Analysis of Literature...” are far too long. A discussion about the list of scholars’ work is needed, and the list can go in a table and/or appendix, as I suggested in my first review.

3. An introduction is still missing. The abstract can stand for introduction to a certain extent, but it still needs to be reworked. Paragraph 1.1 “Explanations for the preparation...” cannot go at the beginning of the introduction. Abstract and introduction are two distinct and key parts of any written work.

4. Paragraph 1.1 “Explanations for the preparation...” does not stand for the methodology section. You need to say how and why you will tackle the subject and its significance in relation to previous works and earlier approaches.
5. Banatea, Trachon, Via Nova Trajana are not positioned correctly. Their inaccuracy might affect the discussion of your article. I would recommend looking at the following articles as a starting point for Via Nova Trajana:

  http://publication.doa.gov.jo/Publications/ViewChapterPublic/1030
  https://www.academia.edu/11662334/Roman_Roads_and_Routes_in_North_east_Jordan
- It is known that Trachon is Leja; see the introduction in IGLS XV. It discusses historical sources, including Strabo and Josephus.
- For Banatea see the introduction in IGLS XIV

6. Despite the additional comprehensive map, it is still unclear where places are. You need:

- To relocate correctly Banatea, Trachon and Via Nova Trajana. These are some samples of inaccuracy, but I would reconsider checking other areas more carefully.
- You cannot use a point for an area
- It is better not to use “/” to offer the ancient name of the modern site
- Sites and areas have different spelling; which one are you using and why? It is important to explain this to the reader, but it should not be in the introduction. You do not need to use italics for them. You could potentially list different spelling of different sites where you have their geocoordinates of sites. Be careful how you spell sites, like Damaskus and Nukra. I do not think those are the right spelling.
- Road and qanat systems displayed on the map are way more complex than those displayed on the map.
- The zoomed tesserae are not straightforward to understand where they are situated.

The article cannot be published as it is; unfortunately, the lack of clarity and structure, inadequate writing style, and inaccurate identification of places and geographical areas make it difficult to grasp the significance of this research.

My recommendation is to ensure that at least the six points above need to be addressed. Once they are addressed, the article needs to be reviewed again by a third reviewer. Addressing those points will only enhance the importance of this research, which is worthwhile to publish after a careful edit of the text.

Evaluation round #1
DOI or URL of the preprint: http://dx.doi.org/10.6084/m9.figshare.17705069

Author's Reply, 12 Mar 2022

Download author's reply

Given the current events in the world and the countless suffering, it is difficult to focus on other things and their importance. However, I used the sleepless nights and restless days to implement your important comments and also justified criticism in my work. The critical remarks made by Ms. Mazzilli particularly triggered me, because as a surveyor I felt particularly caught by this. (but also often rightly so, I would like to say. ;-)
I completely revised the research-paper and so many sentences and paragraphs were changed and optimized that the change tracking in MS Word after a short time only displayed a red markup bar on the left in a vertical ongoing line. Due to the restructuring, new versioning and addition, the footnotes have changed. Therefore, I had unfortunately to deactivate these change tracking in MS Word so that the footnotes were rearranged and updated again! Sorry for that.

for the complete Answer please look at the uploaded pdf-File

PS: Upload was not possible her. (5MB Limit) Please use the DOI

**Decision by Luc Doyon, posted 04 Mar 2022**

Dear Dr. Kleb,

I am happy to inform you that I received feedback from two reviewers on your submission to PCI Archaeology entitled “Raepta, Arpha and Raphana of the Decapolis. A new scientific approach to the until now unidentified location of the Decapolis City, which was positioned toward Arabia, at the northeastern border of the Empire Agrippa II”. As you will be able to appreciate from the detailed reviews below, both reviewers highlight the merit of your research and the pertinence of combining diverse data sources in order to tackle the research question you aim to resolve. They, however, raise a number of issues, with which I agree based on my own reading of the paper, that would require to be solved prior to recommending your manuscript.

First, I would invite you to change the title of your manuscript to make it more straight to the point. This would be an opportunity to clarify what is the new approach implemented in the study.

Second, as highlighted by both reviewers, the sections 2 to 4 could be improved. Rather than repeating the judicious comments below, I could perhaps recommend to reformat the manuscript in a more streamlined fashion which would include the following section: a brief introduction, some research background where the literature review is presented, a methodological section where you detail the new approach followed by a results and a discussion sections.

Third, both reviewers raise issues related to the type of illustrations selected and the way they are presented in the document. I encourage you to consider their suggestions and make the appropriate changes to the manuscript whenever possible. I should also highlight here that figures and tables must be cited in the text whenever you are referring to them.

Finally, although this is not a reason to disregard the manuscript, I encourage you to review the language of the manuscript to remove any errors and convoluted sentences. In addition, I would appreciate you to include your affiliation (if any), position and contact information in the document to ensure that any colleague interested by your work may be able to reach you in the future.

As you are aware, PCI Archaeology is committed in recommending high-quality manuscript. I strongly believe that thanks to the comments provided by the two reviewers, you will be able to make the necessary changes to improve your manuscript. I therefore invite you to submit a revised version at your earliest convenience. In order to facilitate the review process, I would ask you to provide along with your revised manuscript, a point-by-point response to the reviewers’ comments and a version of your manuscript with track changes.

I remain available should you require further information.

Best regards,

Luc Doyon

**Reviewed by Rocco Palermo, 04 Mar 2022**

This paper discusses the identification on the ground of the city of Raphana, one of the urban centres of the Greco-Roman Decapolis in Southern Levant. The author explores the topic from a multi-scalar perspective
that involves an accurate analysis of the literary sources (both ancient and modern), historical evidence, and remote-sensing techniques (satellite imagery interpretation).

The first section of the work deals with the interpretation of a plethora of classical sources (Pliny, Flavius Joseph, Strabo, etc.) and I do believe that this part is the most detailed and convincing one of the paper. The author clearly possesses an extensive knowledge of the sources and these are substantiated in a correct way through the whole analysis. Also, the integration of historical information, studies from early scholars, and literary sources make the narration extremely interesting for the reconstruction of the historical geography and the socio-political landscape of the region in the early centuries of the 1st millennium AD.

The second section, devoted to the analysis of the evidence retrieved by early travelers in the region, is also very interesting, but I have the impression that it could have been shortened a bit, in order to leave much more space to the archaeological data interpretation of the following part. Nevertheless, sub-chapter 2 is very intriguing, and my suggestion to the author would be to perhaps use this knowledge – enriched and ameliorated – to build a different piece of literature solely devoted to early travelers and explorers: this is something that usually is missing in the archaeological and historical-devoted journals, but that could be very much appreciated also by scholars of different fields (i.e., literature, modern history, Middle Eastern studies, etc.).

Parts 4 and 5 represent the core of the article. The final conclusions to which the author arrives after the analysis of past records and spatial data could be indeed appreciated, and there are very few doubts about the identification of Rapha. However, I would have preferred a more systematic use of satellite imagery, and perhaps not necessarily – and uniquely – from commercial repositories like Google Earth. These images provide very useful insights on the contemporary landscape, but one that has been heavily industrialized and intensively cultivated. I would suggest to the author to check the declassified imagery database (e.g. CORONA Atlas?), in order to have a glimpse on a landscape prior to the very contemporary era, also considering that the author frequently compared images from the aerial reconnaissance of Poidebard with satellite imagery. Old images like the CORONA (from the 1960s, mostly) have the undoubted advantage of being closer in time to the flights of Poidebard and showing – with much more detail in terms of resolution – a similar scenario.

From a formal perspective, the writing is not always clear and the paper might have benefitted from some less baroque approach to the discussion. Some errors and typos are spotted here and there (e.g. Summery instead of Summary at the very beginning).

Final comment: *many* sentences need to be supported by proper references: at the current state it is difficult to discern whether a concept/analysis comes directly from the author or it has been borrowed from previous works.

**Reviewed by Francesca Mazzilli, 14 Feb 2022**

It is an in-depth research article identifying Raepa/Arpha/Raphana through a multidisciplinary approach. The author builds up the article’s argument by gradually introducing ancient sources, followed by a literature review of explorers and scientists from the 19th-20th century to an analysis of old and new maps, occasionally aerial photographs, and a fascinating in-depth discussion of satellite imagery. This article clearly expresses the need to undertake a systematic interdisciplinary work on the topic (the article’s aim) due to the ongoing uncertainty of identifying Raepa/Arpha/Raphana over centuries.

The paper presents a convincing argument suggesting that Raepa/Arpha/Raphana would have been situated at Ar-Rafi’ah where military settlements and water resources (qanats) have been identified through satellite images. However, it is an open question if they are evidence of a Herodian occupation and of Raepa/Arpha/Raphana.

It is a fascinating work, especially the analysis of satellite imagery, but the article’s length, wording, and frequent lack of clarity or better visual aids (maps, tables) make it quite challenging to follow.
These flows start from the title. It is too long, pretentious, and not catchy. The title and the abstract affirm the new scientific approach of this research, but it is unclear what exactly the new approach is about based on the title and the abstract. This new approach is not described in the introduction, and there is not a section about the methodology, which is strange considering that claimed new scientific approach of paper. It would be good to clarify the approach from the beginning. The abstract functions more like an introduction, explaining the different sections of the paper.

The first half of the paper feels quite long; even the Author needs to have more than one paragraph summarising the set of information discussed in one section towards the end of each section. By the time I am reading the conclusive remarks of each section, I have almost forgotten the main points of discussion in the actual section.

Sections 2, 3 and 4 are highly descriptive, like “who said what”, informing the reader on previous work or ancient authors’ identification of sites takes much space in the article. This way of presenting information makes it difficult to go back to the main text and check what a specific author or scholar said. For instance, I would put a series of tables providing each the following sets of information: a historical overview, a list of the ancient authors and their identification of Raepa/Arpha/Raphana, a list of modern authors with their discussion of the case study, and what different maps inform us. I would use the core of the article to discuss the information outlined and described in these tables. As a result, the article will be more concise, the text flow will be smoother, and the paper’s main thread of the paper will be clearer and more engaging.

Unfortunately, because of the lengthy description of what the ancient and modern authors say, for instance, the interesting interpretation of the Author gets a bit lost from time to time. Scholars’ interpretations and ancient authors should be included in the discussion, not generically saying something like as discussed in the literary review session. It is good to be specific and bring back points discussed in other sections in detail.

As this is an interesting technical, scientific paper, I would expect high quality images. An overviewed map of the area is much needed, all the maps are quite zoomed in, and it is not easy to understand which part of Syria the article is dealing with. The reader might not be an expert in the subject, so it is essential to provide visual aids throughout the text since the beginning as the article discusses a lot of site names and different areas, like Trachon, but the reader might not be familiar with them and a generic map with site names and areas would be advantageous.

Figures from the article do not seem to be referenced when discussing specific sites or maps in the text. It is good practice to reference figures in the text, primarily in this article, where it is crucial to know where sites and areas the article is focusing on.

I would georeference all maps from Section 4 and create an inclusive map showing the various identifications of sites based on the maps discussed in the article. Using original maps is good, but it is not possible to compare them due to different sizes, so having the information from different maps into one map would be helpful.

For satellite images, I wonder if the Author has looked up the database by EAMENA or even ask any team members if they can provide you with some additional interesting insight.

It is essential to add north arrows for all the figures and the scale is often missing (Fig. 1-4 and 7-11). Figure 4 seems to be a different orientation of Figures 5 and 6. It is difficult to pinpoint Figure 6 in Figure 4. It is good to have an overview, like Figure 4, but it is an overview from the East, which is rather generic and unclear. Even in this case, a zoom-out map of Syria, specifically south of Damascus, Ghouta, would be quite helpful.

When discussing satellite images, it is good that Author compares military settlements with other examples from the surrounding of Bosra. However, how can we date to military settlements from Ghouta to Herodian period? Dating issues need to be at least raised.

It is overall a meticulous piece of work providing a wide range of sources and overarching overview of the long-term work on the topic, but a more concise synthesis of Sections 1-4 can help the flow of this interesting
article. Section 5 is the most substantial and more engaging part of the text, drawing together some information from other sections into discussion.

References
- Maurice Sartre is an expert in toponyms in Syria. It might be worthwhile to contact him or check his publications, like the following:


Les cites de la Decapole septentrionale: Canatha, Raphana, Dion et Adraha, Colloque sur la Decapole, Oxford, 21-24 septembre 1992, Aram, 4, p. 139-156
- Why is there a missing footnote 2 for Trombley?
- A bit odd reference


Maybe consider looking at IGLS or rearticulate the reference by using the surname of the translator

Some specific sentences that would be good to modify in order to improve the quality of the text
- For instance, on page 11 all at sudden the conclusion of this section starts “At this point, the historical outline shall find a conclusion here.” I would avoid this type of sentences.
- Colloquial sentences to modify
- On page 6 “If these few references are followed..”
- On page 7 “at this point it will be useful to present...”
- Unclear and long sentences
- On Page 6 at end of the first sentence
- Too long sentence in the sentence that starts “The last section..” on Page 6
- On page 10 at the beginning of third paragraph “The fact that Josephus...”
- Is it a quotation by D. Fossey at the end of page 13 beginning of page 14. It is not clear.
- On page 19 this map analysis shows... which map? It is unclear to me
- On page 20 at the end of the page the article discusses satellite imagery, which one? Figure?

The above list is a sample of sentences that need to be rephrased, but a more detailed revision of the writing throughout the text is recommended.