

Response to David King

Dan Gibson

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*The Muslim Heritage website recently published an article by Dr. David King, a respected professor who reviewed my book **Early Islamic Qiblas** in an article titled: **From Petra back to Makka, - from “Pibla” back to Qibla**. (<http://www.muslimheritage.com/article/from-petra-back-to-makka>). No address or place was given for response, so I decided to release my response to that article on academia.edu.*

Needless to say Dr. King disagreed with my book, my research, my findings and thoroughly roasted me in the process. I was surprised at this, as I felt that I agreed with most of what Dr. King writes, outside of his view of how primitive the early Arabs were. I was not expecting such a volatile response, but I was expecting someone, somewhere to disagree with my findings. So it is a relief to finally face some serious academic criticism. Dr. King’s article is a long one, but I will try and keep my response as brief as possible.

In his opening paragraph, Dr. King is correct in stating that “*Most Muslims and most Westerners who know anything about the subject would say that his (my) “findings” are absurd.*” Dr. King repeats this line of arguing throughout his article.

From the very beginning I have faced criticism that the very idea of Petra being the original Mecca is so absurd that it cannot be true. It goes against everything that we know about Islam, and everything that Islam says about itself. However, absurdity does not negate the possibility, nor does it create a strong opposing argument.

Dr. King ends the second paragraph stating that my arguments were weak, and that my bibliography in *Qur’anic Geography* did not include a single work on the Qibla, especially no mention of his own books and articles. So, please note that Dr. King is the author of the article “q̣ibla” in the *Encyclopedia of Islam*, and he is the author of various articles and books on the subject. (See the bibliography for David King in my later book: *Early Islamic Qiblas*.) In effect, he is one of the world’s leading scholars on the Qibla.

Dr. King then points out: *the authoritative Encyclopaedia of Islam has no entry for the city of Petra, as nothing of consequence in early Islamic history happened there.* Of course, I totally agree, and this is why I wrote the books and made the videos, to demonstrate that something did indeed happen there.

King goes on to state that: *Such revolutionary findings, if true, would challenge both historical studies and also the Muslim community at large.* Again, this is absolutely true, but it is not an argument against my finding, but simply pointing out what is obviously the case.

Then Dr. King boldly states that *Gibson comes from a family of Christian missionaries who have lived in the Near East for three generations.* This is news to me. My grandfather and father collected a great deal of information on the Near East, including archeological reports, books and journals of the period. But my grandfather, Henry Gibson never traveled to the Middle East. He was an electrical engineers from the UK, a holder of multiple patents, and a fan of Flinders Petrie, the noted Egyptologist. My father, David Gibson, never traveled to the Middle East. He was restricted to a wheelchair from the age of 12, after a bout with polio. He did, however, continue his pursuit of understanding Near East history and amassed a sizable library. My family has boxes of his correspondence with many leading thinkers of his day. Sorry, no Christian missionaries in my family history. Not that I would find that offensive. I wonder where Dr. King got this information from? I have no idea why he invents missionaries at this point, or even mentions Christians. Perhaps it is meant to demean my character? He does claim later in the paragraph that the *“Christian lunatic fringe” has already adopted this very useful arsenal of “weaponry” from Gibson.* You can learn more about my family history by seeing the YouTube video: <https://www.youtube.com/watch?v=-Wm7Ka4bHck&t=5s>. This video was recorded before I read Dr. King’s review.

In the section called “Gibson discovers the opposition” Dr. King reveals more of his thinking. He claims that I undertook a survey of early mosques because of my pro-Petra inclinations. Actually, I was undertaking a study to discover how many mosques pointed to Jerusalem, when I discovered that many pointed to Petra. I then put that aside until I had time to do a more complete study.

King then states that I began my book, *Early Islamic Qiblas* by: *quoting from my very technical 1986 article “Kibla (astronomical aspects)” in the Encyclopaedia of Islam (without attributing it to me)!*

Dr. King, please accept my apologies. I did fail to mention who wrote the actual words. I quoted the source simply as: Encyclopedia of Islam, Volume 5, page 88, 1986. However the bibliography clearly states that the article was by Dr. King.

Dr. King then goes on to emphasize from his research that: *the qibla of the Companions of the Prophet (who built the first mosque in Egypt) was toward winter sunrise, not Petra.* This is a good summary of the difference of opinions between myself and Dr. King. Basically it is an “Astronomical Orientation Theory versus the Petra Qibla Theory.” As you will see in the following pages, Dr. King and I use many of the same sources for our research but we each arrive at a different conclusion.

Now Dr. King presents his strong arguments. They begin with:

1. Gibson's book is *not a scholarly work, it is the kind of text one would expect from a first-year college student*. (Thank you for your keen assessment of my writing style, I strive to write simply, so that school age students can understand what I am saying.)
2. Gibson is *not competent to write on early Islamic history and often misinterprets the few serious sources he does consult*. (No comment, as there are no specific examples given at this point.)
3. Gibson fails to mention *the astronomical orientation of the Ka'ba*. (This refers to the study done by Dr. King and also Gerald Hawkins. I failed to mention this, not out of ignorance, but because it was not in the scope of my study. However, since we are on this topic, please note that these astronomical orientations are not unique to the Ka'ba building in Mecca in Saudi Arabia but also apply to Petra, and have been studied by many others including Juan Antonio Belmonte, with whom I have had personal correspondence.)
4. Gibson fails to *understand that the qibla was determined by some using folk astronomical techniques from the 7th century forward* and not just till the 9th century *and* that mathematical methods were from 9th Century. In reading this section of my book again, I realize that I was not as clear as I should have been, and that the illustration could have been misleading. I tried to present the idea that once the Arabs lost their initial methods of determining the Qibla direction, other folk-astronomical techniques were developed. We have records of these starting in the 8th century. Many of these are explained in King's books and articles. I do point out that the development of these methods resulted from an interpretation of a Qur'anic verse that states that the stars were given to guide mankind. (Qur'an, 16:15&16) Therefore some Muslim clerics shied away from using mathematical solutions. I also apologize to Dr. King for insulting him with my hinting that the Arabs knew something of mathematical methods as early as the 7th century. This opinion seems to have touched a raw nerve.
5. Dr. King then complains that Gibson only *mentions Jan Hogendijk's research in passing*. In response, my search for qibla-finding methods focused on methods of finding the qibla, before the medieval books that Dr. Hogendijk used. Therefore I felt justified in only mentioned him in passing, but in no means want to lessen the importance of his work.
6. Dr. King then noted that Gibson claims that King claims that early Qiblas were "wildly inaccurate." OK, I concede this point. Dr. King calls them "approximate solutions." I used the words "wildly inaccurate." I was summarizing what Dr. King wrote in the section (2.3 *The sacred geography of Islam*) where Dr. King describes the various "sectors of the Ka'ba" concept resulting in different directions spreading out from the Ka'ba. Again. I was summarizing what I felt Dr. King was presenting, in order to demonstrate that my interest lies in earlier methods used by the Arabs, before those described in 8-9th century and later manuscripts. My question

in my minds was: “Could the qibla accurately be determined before mathematical solutions were introduced?”

Dr. King then introduces us to his purpose for writing his review: **“The ultimate purpose of this essay review is to demolish the Petra thesis for all time.”** He attempts to do this by claiming that the necessary technical equipment – trigonometry, geometry, geographical coordinates, astronomical instrumentation, and so forth *became available to the Muslims in Iraq only in the late 8th and early 9th century, Gibson’s attempt to fabricate the evidence for an earlier epoch falls flat.*

Somehow Dr. King seems to miss the whole point of this chapter of my book. It is all about how the Qibla was determined WITHOUT the use of mathematics. I agree with him that mathematical solutions came from the late 8th century forward. I readily accept that he is one of the world experts on these mathematical solutions. I have no argument with what Dr. King presents in his books, which explain how these mathematical solutions worked. The only place I differ with him, is that I believe the Arabs were able to accurately determined the Qibla direction before mathematical solutions became popular; and that once the Arab armies enter the west where Roman roads gave directions, they slowly lost their ability to navigate by the stars, and thus calculate their qiblas using the stars. I base this on my research of the Qiblas, which demonstrate that there were four Qiblas in the first 200 years, and all of the mosques in the first 200 years of Islam show a great deal of accuracy when measured against these four qiblas, but slowly the accuracy drops until mathematics comes to aid the mosque builders. Dr. King seems to be convinced that the Qibla could not be determined without mathematical solutions, therefore he rejects everything I present and simply claims that it could not be done.

King goes on to state: *The first thing to make clear is that early mosques cannot be expected to be oriented in the modern direction of Makka (or Petra), and they should not be labeled “incorrect” if they do not face that direction.* This is Dr. King’s escape hatch, and he seems willing to accept many different qiblas, such as the solstice to the east, a solstice to the west, a qibla facing north, or a qibla facing south and so on. King goes further to state categorically that: *there were several qibla directions used over the centuries, sometimes associated with particular interest groups.*

He then states: *that even the basics of how the qibla was determined and how it was applied to religious architecture over the centuries are not generally known.* Here I agree completely. This is what my book is all about. This is what I am researching. I demonstrate the accuracy of the qiblas through the survey and try to reconstruct how they did it.

But King claims that the answer comes from astronomical alignments of buildings, since the Ka'ba was also astronomically aligned. It is a wonderful theory, and I heartily agree that the Arabs were keenly aware of astronomical alignments. The Ka'ba in Mecca was indeed astronomically aligned, a unique feature in the city of Mecca in Saudi Arabia. But as Juan Antonio Belmonte has demonstrated, in the city of Petra almost all of the major monuments were astronomically aligned.

King then spends several paragraphs arguing for the astronomical alignment of the Ka'ba, such as summer sunrises and the rising of Canopus. King infers that this was important to earlier traditional astronomy and is the key to understanding Qibla direction. This is where he and I have differing opinions. I see the descriptions given in 8th-9th century writers (and some later ones) as trying to suggest solutions to how the earlier Arabs managed to set their qiblas. That is the way I read Arab history. Of course I could be wrong, but Dr. King seems to point to the trigonometrical or geometrical solutions of the 9th centuries and following as the only acceptable solutions.

Dr. King then points to various 12th to 14th century treatise and notes that these writers were "clueless about orientations, not knowing what people in past centuries thought was the Qibla." This seems to me to say that they were clueless about Dr. King's astronomical alignment theory. This is why I turned to the Arab navigational books, rather than the architectural writings that Dr. King uses.

Dr. King then accuses me of trying to make the mosques face either Petra or Mecca. I wish he had read more closely that I set out to determine which mosques faced Jerusalem, as I had visited a number of mosques where the custodians made this claim, and I wanted to check them. At that time I had no idea that Petra was even an option.

There are so many things I could comment on in the following sections but I will attempt to be brief. Dr. King suggests that different parts of the Islamic world set their Qiblas differently. While this may have been true from the 8th century forward, I specifically am trying to establish how it was done during the previous two centuries.

In my book I quote a section of Al Tabari which tells the story of how they went about establishing the Qibla for Al Aqsa mosque. They approached Ka'b, who had the knowledge to determine the qibla direction. This knowledge was not generally known. As the Muslim armies expanded the Arabian empire into the Roman empire, men like Ka'b moved with the armies, and established the qiblas of the new major mosques. However, in time these men died and this knowledge was lost, and qibla finding went through a difficult time until mathematical solutions were suggested in the 9th century. I think this all fits the scenario that King is setting out.

Dr. King just seems to have trouble accepting the solutions I present, and feels that they could not be known or reconstructed from earlier materials. He then points to the poorly aligned churches of the time as an example of how poorly they knew how to orient churches. Of course, the Christians did not have the years of celestial navigation that the Arabs caravans had, but King seems to not accept this.

Dr. King then classifies me as a “revisionist” along with Wansbrough, Crone, and Cook, and points to Serjeants’ brilliant and devastating review of Cronen’s book “Hagarism.” He seems to suggest that the same devastating reviews reflect on my own research in some way. Or perhaps he is hoping to write just such a devastating review of my work.

Much to my surprise Dr. King then claims that I used the same starting point as the long-disproved premise of Crone & Crook, and that I “played around” with orientations, was unaware of astronomically-defined directions that mosques may have faced, and that I was clearly out of my depth.

He then claims that my new book *Early Islamic Qiblas*, was based on articles that appeared on the website www.nabataea.net over the past few years. This is very strange indeed. I began writing these articles in August of 2016, after the release of the documentary film “The Sacred City.” Several scholars wrote me and asked me to publish my data in greater detail. I agreed, and began to organize my data into a number of articles that addressed different questions that were being raised about qiblas and determining Qibla direction. These articles never appeared on www.nabataea.net. I have no idea where Dr. King got this idea. I only wish that he did his research a bit more thoroughly before writing such things.

Early in 2017 copies of my papers were circulated as ‘drafts’ among a number of scholars before publication. Over 170 scholars and interested people read them, and many replied with excellent suggestions. I am greatly indebted to them and their interest, encouragement, and comments. If you happen to come across a copy of one of these draft articles, please ignore it, as changes were made before they were released under one cover: *Early Islamic Qiblas*.

King then goes to to claim that my study of early mosques is flawed because I measure the qiblas of early mosques and then compare them with Mecca, Jerusalem and Petra. I suppose Dr. King would have been happier if I had included such things as the direction of the sunrise at the solstices, sunrise during various seasons, the orientation of nearby churches, and the orientation of major landscape items such as nearby roads, mountain slopes, Roman ruins, etc.

I admit that my survey was limited to the qibla direction of the first two hundred years of Islam, and that I only compared mosques with other mosques. I find no command in the Qur'an for Muslims to face the solstice, or to face east or west. The Qur'an is very clear that they are to face Masjid al Harām. That was the entire purpose of the survey, and I apologize if I offended Dr. King by not including his "astronomical projections. This is the area of study that Juan Antonio Belmonte and his team are doing. I have had some excellent exchanges with him without either of us feeling threatened in any way.

Dr. King then returns to his major thesis: *Gibson's "discovery" that most early mosques face accurately toward Petra is fortuitous because the first generations of Muslims had no means whatsoever for finding the direction of Petra accurately to within a degree or two, not least because they had no access to any geographical coordinates.*

Again this is why chapter five exists, and I invite readers to examine this chapter to see if I have not provided several methods of determining the qibla direction without using geographical coordinates. Again it is my opinion versus Dr. King's opinion.

Dr. King then returns to his argument that the more than 30 medieval Arabic, Persian and Turkish manuscripts that he has identified, all focus on the Ka'ba in Mecca, and that not one mentions Petra. And again I agree with Dr. King. My research demonstrates that the Petra Qibla was changed around 70 AH. The above mentioned writers wrote centuries later. I think we have labored these arguments over and over again.

Some pages later, Dr. King sets out to demonstrate his point, using several of the mosques I refer to. Unfortunately, each of these will have to be dealt with separately.

China

Dr. King claims that the Muslims must have come to China *on flying carpets!* He claims they had no boats. He says: *"But how did they know where they were? Where Petra was? Did they really know about great circles on the terrestrial globe?"* I point out several methods in the book of how they knew where Petra was. And of course they knew the world was round. In my earlier book *Qur'anic Geography* I note that by 24 BC Nabataean boats were moving incense on the Red Sea, and that Agatharchides (130 BC) records Nabataeans involved in Maritime trade. This is why the study of navigation is so important, and why it is important to establish general dates when Nabataeans and Chinese began direct trade.

In *Early Islamic Qiblas* I spend considerable time giving dates and charts of connections between the Arabs and China dating back to before the time of Christ. I point out a specific instance around 25 - 55 CE when a group of Arabs traveled to China and then returned. I spent years chasing down these connections, and writing many letters, and even traveling to meet scholars of Chinese history. I worked with one scholar, carefully tracing the route that a Chinese explorer and envoy took as he crossed the Middle East, visiting Petra on his way to Rome. I personally traveled that route while in communication with this scholar on the other side of the world. Somehow Dr. King must have missed this section of the book, and suggests that communication between Arabia and China was impossible. The current Guangzhou mosque was built on the foundation of a previous mosque, and it points to within 3° of Petra. If it was the only mosque in my study it could have been a coincidence. But there are over a dozen good examples that point to Petra, and others that seem to have pointed to Petra from their descriptions in early manuscripts.

Egypt

Dr. King then picks out one of the more difficult mosques to measure. All we have is the record of Ahmad ibn al-Maqrizi who writes that the original direction of this mosque pointed east (which happens to be the direction of Petra. It was later corrected towards Mecca. Dr. King claims that the original qibla was towards the eastern winter sunrise, which I have not measured and cannot comment on.

Yemen

I do not understand Dr. King's argument here. He is correct in that the mosque points at Petra, and that its major axis is parallel (within 2°) of the Ka'ba in Mecca. I lived Sana'a in Yemen for 3 ½ years, and visited and passed this mosque many times.

Jerusalem

I am unsure why Dr. King mentions the al-Aqsâ mosque. I see no argument, other than perhaps the qibla measurements he mentions are different than mine.

Jordan, Syria and Lebanon

I have tried to carefully measure these mosques and their qiblas. Dr. King quotes my measurements and then states that the qibla was obviously intended to face due south. I wonder how he knows what was in the builder's mind? Couldn't they use the Arab compass that I so carefully describe in detail and find the opposite direction from the North Star? Finding due south is very easy. But pointing to Petra is much more difficult. So how could they manage to miss due south, and end up facing Petra? For instance Khirbit al Mina points within 0.8° of Petra, yet Dr. King explains that it was supposed to

face south, and they missed, and again, pointed almost exactly towards Petra. What a coincidence! Dr. King must be a mind reader to know what they intended, and failed to do!

When I deal with Ba'albeck in Lebanon, I see that mosque as one of eight that point to the same qibla, directly between Petra and Mecca. I go to great lengths in the book to establish who was responsible for building these mosques and setting their Qiblas. I explain why this builder refused the Petra and the Mecca Qiblas. But Dr. King notices that this mosque misses due south by 3° and therefore the builders must have intended for it to face south. He does this with several other mosques that are generally north of Mecca, noting that while they miss pointing directly south they were off by several degrees, which he claims is “not bad for that time.” I on the other hand note that all eight mosques point to exactly the same location.

Asia

King does the same thing for mosques that are east of Mecca, claiming that they point a “careless” west. Again it seems that the major argument here is: Did the mosques point to specific places or were they simply “careless” about where they pointed. I see very carefully set qiblas, that fit an overall pattern, while Dr. King sees carelessness.

Spain

Dr. King insists that “*at that time these folk had very limited geographical and mathematical knowledge*” so they couldn't get it accurate. They simply built on top of the 1st century Roman street plan. Again, we both see the same information, and we come up with two different conclusions. As these builders were very opposed to the ruling Abbasid rules in the east, I suggest that they deliberately chose to use a parallel Qibla. Dr. King sees it as chance.

North Africa

Dr. King claims I could have spared myself considerable embarrassment by consulting the works of Rius and Ronine. He notes that we claim slightly different qibla directions, but that they claim that the qiblas were established by a pre-existing Roman system and not set by celestial measurements. Again I suggest that these builders were in rebellion with the rest of Islam and chose to use a Qibla that was similar to the one used in Spain. They are all very similar.

Syria, Jordan and Lebanon

Dr. King agrees that the 'Anjar Palace mosque points almost directly at Petra. King concludes: “*So it does, but nobody could have planned that at the beginning of the 8th century, toward Petra or anywhere else.*” Again, his option versus my opinion.

Regarding the Raqqa mosque, I claim it points almost directly between Petra and Mecca, as do 7 other mosques, but Dr. King states: “...*there is no evidence that anyone ever tried to align an edifice “between” two distant goals, and that is certainly not what has happened here.*” He goes on to guess that the direction was not calculated, nor derived from the rising and setting of the sun at solstices, nor even of a bright star. So Dr. King would rather accept the unknown and state that it was not calculated, rather than deal with an observation from the data that there were eight mosques that faced the exact same place, which happened to be directly between Petra and Mecca. He does not accept that General Ḥajjāj was responsible for the construction of these eight mosques, nor that General Ḥajjāj had reasons to refuse both a Petra and a Mecca Qibla.

Then King suggests that the orientation of later mosques would have been useful in my research. It seems he doesn't like that I stopped surveying mosques, which are all before his focus of research. However, in the book I give some examples of major mosques up until 260 years after the founding of Islam to establish that Mecca ended up as the accepted qibla.

King now turns to chapter five, where I give explanations of how the Qibla could have been established. I use materials drawn from al-Najdī's writings, where he recalls how early navigation was done. I also use materials drawn from how modern Arab navigators use many of the same tools to navigate their dhows and find their direction over the empty ocean. But Dr. Smith calls it “*a desperate hopelessly-muddled and utterly-puerile chapter*” among other things. I guess he sees no connection between navigation that pinpoints a port over the horizon and Qibla-finding techniques that pinpoint the Ka'ba over the horizon.

He then argues that the Arab compass (windrose) was used only in Arab navigation and not for finding the Qibla. The point in my book is that Arab navigators of the time clearly had the ability to use their navigational knowledge to set their qiblas.

I spend many pages describing how this works, but King dismisses it and calls it utterly-puerile (childish). He claims that I should be better acquainted with those writers who much later used mathematics.

Dr. King seems disappointed that I did not include many more articles of his and his colleagues. I am sorry but they deal with the methods of finding the Qiblas much later in history than I am interested in. He is sorry that do not give anything on the history of Islamic mathematics. Here I must point out that this is the focus of Dr. King's research, but not mine. He does seem happy that I include G.

Tibbetts' translation of Aḥmad ibn Mājīd al-Najdī's book: *Kitāb al-Fawā'id fi uṣul al-baḥr wa'l-qawā'id*. Indeed I have spent many hours in this book, trying to get an understanding of what knowledge al-Najdī says the Arabs had before they used mathematics.

Somehow Dr. King managed to disqualify everything I present in chapter five, because he felt that the Arabs of the 6th and 7th centuries could not have known what I claim they knew. He even disqualifies the possibility that homing pigeons could have been used to set Qiblas. I guess my research and discussion with academics who study homing-pigeons was all in vain then.

In the end, Dr. King dismisses the book as the babbling of an amateur who has no knowledge of classical Arabic, and is without critical training in Islamic Studies.

However, from my point of view, I highly respect Dr. King, and find his research on the mathematical methods used for Qibla finding in later years to be excellent. He is one of the top world experts, if not the greatest expert on mathematical methods used to establish the Qibla. He has done a wonderful job of researching the medieval Arab mathematicians.

I am disappointed, however, that he so strongly believes that earlier Arabs were clueless in their ability to guide their caravans over the trackless desert, and later to guide their small boats over the trackless India Ocean. Dr. King seems convinced that the early qiblas were all approximations, and that my research has uncovered nothing. I guess, in the end, the reader will have to decide.

Was it just chance that those setting the Qibla direction in 'Anjar missed pointing south by multiple degrees and ended up pointing to Petra within less than one degree? Is this scenario repeated over and over again in other mosques, that missed their target and just happened to end up pointing to Petra?

Was it by chance that Armenian writers placed Mecca as a location in Paran, in the Roman province of Arabia Petrea, which is a good description of where Petra is today? (Brosset, M., Collection d'Historiens Arméniens, 1847, Volume 1, page 88-99, especially page 89)

Was it by chance that all of the descriptions of ancient Mecca can be found in ancient Petra?

I personally do not think these things were all by chance. The qibla directions in my book speak for themselves. If I was able to only locate one or two Petra Qiblas, then my interpretation could easily be wrong. But if the pattern is repeated over and over again, what are the chances that they are closer

to the truth than builders who just missed their original targets? And what are the chances that so many historical and archeological anomalies support a Petra Qibla?

I apologize for upsetting Dr. King. I am not trying to support my theory at all costs. I am simply making observations from what I found. In the end, I see four Qiblas: first Petra, followed by Mecca, then Ḥajjāj's between Qibla, and finally the Spain and North Africa rebellion using parallel qiblas. I am willing to change my opinions if something else becomes evident. Dr. King on the other hand is convinced that the sloppy qiblas actually intended to point: east, west, solstices, sunrises and so forth. I have not come across anything in Islamic religious manuscripts that support these Qiblas. But perhaps in time someone, somewhere will stumble across something that will change our understanding of Qiblas. All I have found so far, is that every Muslim expects the Qibla to point to Mashjad Al Harām.

My research set out to find this place based on the Qiblas of all of the mosques of the first two centuries of Islam. I have tried to make myself available to interested people through the film, the YouTube channel, www.academica.edu, and many other venues. Many people have reached me by email or through comments on YouTube. And I welcome them, as I learn so much, and appreciate that I now have hundreds of pairs of eyes combing Islamic manuscripts. While many people have disagreed with some aspect of my research, Dr. King's article is the first that has been written in such a tone. I trust that we can come to some sort of understanding in the near future.

Dan Gibson

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