

## THE ROLE OF SCIENCE IN HADITH CRITICISM: BETWEEN NAQD IJABI AND NAQD SALBI

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### Abstract

*Hadīth studies through scientific approaches are increasingly being conducted. One of the important but rarely highlighted themes in this regard is the discourse of using the facts of modern science as a tool in the method of hadīth criticism. Can a ḍaʿīf Hadīth that is consistent with scientific facts be corroborated (naqd ijābi)? Can an allegedly authentic hadīth be weakened if it contradicts modern scientific findings (naqd salbī)? These two crucial questions, the main foundations of hadīth criticism through modern scientific facts, have rarely been taken seriously. In this article, the author answers these two questions, which also means that the author will dissect the rules and limitations for science to be used as a tool in the method of hadīth criticism. The result of this study is that scientific findings can be used as one of the tools in hadīth criticism. It can be used to strengthen the status of a hadīth or to weaken it. However, it does not mean that it can replace the position of the conventional method of hadīth criticism that is fixated on the sanad of the hadīth. The position of science as a tool of hadīth criticism requires the critic to recorrect the sanad of a hadīth whose matan contradicts the findings of science or vice versa. Moreover, the process of its application cannot be done haphazardly. There are various limitations and strict conditions that must be observed.*

**Keywords:** Hadith Criticism Method, Science, Naqd Ijābi, Naqd Salbī



## PERAN SAINS DALAM KRITIK HADIS: ANTARA NAQD IJABI DAN NAQD SALBI

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### Abstrak

Kajian hadis melalui pendekatan ilmu sains kian ramai dilakukan. Salah satu tema kajian yang cukup penting namun jarang disorot dalam hal ini ialah wacana menggunakan fakta-fakta sains modern sebagai alat dalam metode kritik hadis. Apakah hadis ḍaʿīf yang sesuai dengan fakta sains dapat dikuatkan statusnya (naqd ijābi)? Apakah hadis yang diduga sah dapat dilemahkan statusnya jika menyalahi temuan ilmiah modern (naqd salbi)? Dua pertanyaan penting tersebut—yang merupakan fondasi utama kritik hadis melalui fakta sains modern—masih cukup jarang diperhatikan secara serius. Pada artikel ini, penulis menjawab dua pertanyaan tersebut, yang juga berarti penulis akan membedah seperti apa kaidah dan batasan-batasan agar ilmu sains dapat dijadikan peranti dalam metode kritik hadis. Hasil dari penelitian ini menyatakan bahwa temuan sains dapat dijadikan sebagai salah satu alat dalam metode kritik hadis. Ia dapat digunakan untuk menguatkan status suatu hadis atau melemahkannya. Namun, bukan berarti ia dapat menggantikan posisi metode kritik hadis konvensional yang terpaku pada sanad hadis. Posisi sains sebagai alat kritik hadis ialah untuk menuntut kritikus agar mengoreksi ulang sanad suatu hadis yang matannya berseberangan dengan temuan sains atau sebaliknya. Selain itu, proses pengaplikasiannya tidak bisa dilakukan secara serampangan. Ada berbagai batasan dan ketentuan ketat yang harus diperhatikan.

**Kata Kunci:** Metode Kritik Hadis, Sains, Naqd Ijābi, Naqd Salbi



## INTRODUCTION

There are two main focuses of hadīth scholars in ensuring that a saying or action can be attributed to the Prophet: the sanad (chain of transmission) and the matan (content).<sup>1</sup> However, hadīth scholars gave more attention to the sanad than the matan. They use various methods to ascertain the validity of a hadīth in terms of sanad, such as establishing the continuity of a hadīth's sanad through strict rules and investigating the status or integrity of the narrators in the sanad (*jarḥ wa ta'dīl*).<sup>2</sup>

However, this does not mean that scholars do not have methods of criticizing the matan of the hadīth. The text or content of a hadīth can cause a hadīth whose sanad is connected to the Prophet to become a ḍa'if hadīth. This can be due to several reasons, such as *idrāj* (the addition of additional words that are not from the Prophet), *qalb* (the confusion of some of the words), *iḍtirāb* (the existence of conflicting narrations), and *taṣḥīf* (the alteration of some letters or words that change the meaning) that occur in the matan of the hadīth.<sup>3</sup>

Some of the above points back to the rule of '*adam al-syuzūz*'. This means that even though the sanad of a hadīth is connected (*muttaṣil*), when its matan contradicts another stronger narration (*awsaq*), the authenticity of the hadīth is questioned.<sup>4</sup> What is interesting is that the critique of the matan by the scholars did not only focus on a hadīth's matan that contradicts another hadīth report, but they also paid attention to a hadīth that contradicts the laws of reason, Qur'anic verses, and other *qaṭ'i* arguments. Khathib al-Baghdadi succinctly says that ahad hadīths contradicting these things cannot be accepted.<sup>5</sup>

On the other hand, the reality (*wāqi'*) and facts of science also need to be considered in the criticism of the matan. This is because, with the development of the times, some findings of modern science

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<sup>1</sup> Umma Farida, "Muhammad Nāṣiruddin al-Albani wa Manhajuhu fī Taṣḥīḥ al-Ḥadīth wa Taḍṭīfuhu: Dirāsah Naqdiyyah", *Journal of Studies in Qur'anic and Hadith Sciences*, Vol. 21, No. 2, 2020. pp. 6-7. DOI: <https://doi.org/10.14421/qh.2020.2102-09>

<sup>2</sup> *Ibid*, 7.

<sup>3</sup> Muhammad Luqman Salafi, *Ihtimām al-Muḥaddiṣin bi Naqd Ḥadīth Sanadan wa Matnan* (Riyadh: Dar al-Da'i, 1999), 315.

<sup>4</sup> Maulanida, "Penggunaan I'tibar dalam Matan untuk Mengungkap Pelaku Perubahan Matan Hadis", *Jurnal Nabawi*, Vol. 2, No. 2, 2022. Hal. 10. DOI: <https://doi.org/10.55987/njhs.v2i2.53>

<sup>5</sup> Ahmad bin Ali al-Khathib al-Baghdadi, *al-Kifāyah fī 'Ilm al-Riwāyah* (Madinah: Maktabah Ilmiyyah, 1938) 432.

are based on the content (matan) of a hadīth. For example, the scientific facts are consistent with the Hadīth about the wings of a fly containing a type of antibiotic to kill the bacteria it carries on its legs.<sup>6</sup>

Conversely, some aspects of the hadīth contradict the facts of modern science or medicine. For example, the Hadīth about the ṭa'ūn (a plague) says that the cause of the plague is the sting of a jinn. This contradicts medical science, which says that plagues occur due to viruses and contagion.<sup>7</sup> Scientific findings are a recognized source of knowledge, even by Muslim scholars.<sup>8</sup> So when a hadīth contradicts a scientific finding, it is as if there is a clash between two sources of knowledge.

In light of the above phenomenon, it is necessary to construct the role of scientific findings as a tool of hadīth criticism, either strengthening the hadīth by scientific facts or weakening the hadīth that contradicts scientific facts. The big fundamental question is how far the validity of modern scientific findings goes as a means of criticizing the Prophet's hadīth?

Helmi Basri (2018) conducted previous research on the findings of modern science and its relationship with the Prophet's hadīth, titled "Relevance between Hadīth and Science Methods and Applications in the Frame of *I'jaz Ilmi*."<sup>9</sup> This research discusses various scientific findings compatible with some of the Prophet's hadīth. But the author only focuses on understanding the hadīth based on the facts of modern science, as well as how to respond to the findings of science from the point of view of the hadīth. There is no discussion regarding the discourse of using science to criticize hadīth. This is the difference from the author's research. This is because the author focuses on using modern scientific facts as a tool to criticize hadīth, weakening the authentic ones or strengthening the ḍa'if hadīth.

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<sup>6</sup> Isnayanti, "Hadis Lalat dalam Minuman Ditinjau dari Segi Ilmiah (Analisis Hadis Tahlili)", *Mushaf Journal: Jurnal Ilmu Al Quran dan Hadis*, Vol. 5, No. 1, 2025. DOI: <https://mushafjournal.com/index.php/mj/article/view/337>

<sup>7</sup> Umar Muhammad Abdul Munim al-Farmawi, "*Dirāsah Ḥadīth Abī Mūsā al-Ash'arī Fanā' Ummati bi al-Ṭa'n wa al-Ṭā'ūn*", Faculty Magazine Dirasat Islamiyyah wa al-Arabiyyah, al-Azhar University, Dimyat, Vol. 10, No. 10, 2022.

<sup>8</sup> Mas'ud bin Umar Sa'd al-Dīn al-Taftazani, *Sharḥ al-'Aqā'id al-Nasafiyyah* (Beirut: Dar Ihya al-Turats al-'Arabi, 2014), 32.

<sup>9</sup> Helmi Basri, "Relevansi antara Hadis dan Sains Kaedah dan Aplikasinya dalam Bingkai I'jaz Ilmi", *Al-Fikra: Jurnal Ilmiah Keislaman*, Vol. 17, No. 1, 2018. DOI: <http://dx.doi.org/10.24014/af.v17i1.5336>

Previous studies have a slight intersection with this article, such as the article by M. Idham Aditia Hasibuan et al. (2017) titled "The Contribution of Science in Determining the Quality of Hadīth".<sup>10</sup> In the article, the author only focuses on the validation of some hadīths by the facts of modern science, accompanied by the takhrij of the hadīth history and the description of the hadīth matan. Many studies have such a model, but with different examples of hadīths. Of course, such studies differ from what the author offers in this paper. This is because here the author is more concerned with the role of modern science as a tool in the method of hadīth criticism.

Finally, previous studies on science and hadīth have been conducted by Faizin (2015) with the title "Understanding Hadīth Science: Testing the Validity of Hadīth with Scientific Truth".<sup>11</sup> In the article, the author briefly mentions the status of the *ḍa'if hadīth* that can be corroborated by the existence of scientific facts that support the content of the hadīth text. However, there, the author makes little mention of the role of scientific truth as a tool of hadīth criticism. He also does not mention that authentic hadīths can be weakened by contradicting modern scientific facts.

The research conducted by the author has a broader objective. It not only deals with the topic of the *ḍa'if hadīths* that can be corroborated by the existence of scientific facts that support the content of the hadīth text, but also includes the topic of authentic hadīths that are weakened when their content contradicts modern scientific findings. Then, the author also presents some examples of its application.

In this article, the author uses a qualitative method, with the analysis method being discourse analysis. This research procedure is carried out by collecting data relevant to the discourse of using science as a tool of hadīth criticism and then interpreting them as a flexible and reflective report. This is different from quantitative methods, which are more likely to present data in statistical form. Then, in collecting data, the author uses literature review techniques.

The author collects various literature in the form of books, journals, and other sources with the object of study of this research.

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<sup>10</sup> M. Idham Aditia Hasibuan dkk, "Kontribusi Sains dalam Menentukan Kualitas Hadis", *Edu-Religia: Jurnal Pendidikan Islam dan Keagamaan*, Vol. 1, No. 3, 2017. DOI: <http://dx.doi.org/10.47006/er.v1i3.955>

<sup>11</sup> Faizin, "Pemahaman Hadis Sains: Menguji Validitas Hadis dengan Kebenaran Ilmiah", *Tajdid*, Vol. 18, No. 1, 2015. DOI: <https://doi.org/10.15548/tajdid.v18i1.130>

Furthermore, the data were analyzed using descriptive analysis techniques, describing various research variables through available data, then summarizing and compiling them systematically.

## DISCUSSION

### Hadīth Criticism Methodology

Before discussing the validity of science as a tool of hadīth criticism, two terms need to be understood: hadīth criticism methodology and science. In this subheading, the author will focus on explaining the methodology of hadīth criticism first. Hadīth criticism (*naqd al-ḥadīth*) is an effort made by hadīth scholars to determine whether a hadīth is authentic or *infallible* using a certain methodology.<sup>12</sup> There are two main concerns of hadīth scholars to assess the status of a hadīth: the sanad and the matan.

Sanad criticism is a method unique to Islamic civilization. In the history of other civilizations, even different religions, there is no hadīth of strictly protecting the text by examining the historical path of the text to its speakers.<sup>13</sup> To strive for the continuity of the hadīth sanad to the Prophet Muhammad, the early scholars made various rules about the sanad, which we now know as the science of hadīth mustalah or the science of hadīth dirayah.<sup>14</sup> They divided the sanad into two: the broken (*inqiṭā'*) and the connected (*ittiṣāl*). The discussion of the disconnected sanad branches into several studies, namely *mursal*, *munqaṭi'*, *mu'allaq*, *mu'dal*, and *mudallas* hadīths. Some of these criteria of a broken chain of transmission make the status of the ḍa'īf hadīth.<sup>15</sup>

It should also be noted that it does not mean that a connected sanad automatically makes a hadīth valid. This is because there may be narrators in the sanad who have problems with credibility or honesty. Previous scholars of hadīth have anticipated this by creating a science related to personal criticism of narrators, which we know as the science of *rijāl al-ḥadīth*. The science of *rijāl al-ḥadīth* covers the general standards of how a narrator can be accepted and includes the

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<sup>12</sup> Muhammad Musthafa Al-A'zhmy, *Manhaj al-Naqd 'inda al-Muḥaddiṣīn; Nasy'atun wa Tārīkhuhu* (Riyadh: Maktabah al-Kautsar, 1990), 5.

<sup>13</sup> Muhammad Luqman Salafī, *Ihtimām al-Muḥaddiṣīn bi Naqd Ḥadīth Sanadan wa Matnan* (Riyadh: Dar al-Da'i, 1999), 165.

<sup>14</sup> Hasan Hanafi, *Min al-Naql ilā al-'Aql* (Cairo: Muassasah Hindawi, 2017), 113.

<sup>15</sup> Nuruddin 'Itr, *Manhaj al-Naqd fī 'Ulūm al-Ḥadīth* (Damascus: Dar al-Fikr, 1979), 346.

science of *jarḥ wa ta'dīl*. A narrator who receives a *jarḥ* (negative impression) from the scholars of hadīth criticism will have his narration questioned and may even become a ḍa'īf narration depending on the level of *jarḥ* he receives.<sup>16</sup>

In addition to scrutinizing the sanad (chain of transmission) of the hadīth, hadīth scholars also established rules for evaluating the matn (text) of the hadīth. The content of the text plays a crucial role in determining whether a hadīth is authentic or weak. Generally, the process of critiquing the hadīth text involves collecting similar reports (*sabr al-ṭuruq* or *ṭarīqah al-i'tibār*).<sup>17</sup> Then, a narration with a matan that contradicts the matan of another narration, which is stronger in terms of sanad, will be questioned for its authenticity, even if the narrator is a *'ṣiqah rawi*. Some examples of scholarly criticism of the text include discussions of *ziyādāt al-ṣiqah*, *mudraj hadīths*, *maqlūb hadīths*, and so forth.

In addition to using the method of collecting reports (*i'tibār*) as above, scholars of hadīth criticism (*al-nuqqād*) have also used other methods in the criticism of the hadīth text. Among these are criticizing the text of the hadīth that contradicts the Qur'ān, mutawatir hadīths, and reason.<sup>18</sup> Meanwhile, in the modern era-especially at the beginning of the 20th century CE, when science was developing quite rapidly and scientific facts were proving the veracity of many hadīth texts, ideas began to emerge to consider scientific findings as a tool of hadīth criticism. Can it be used as a method to at least strengthen the status of a hadīth or to weaken it on the other hand? Can it replace the conventional method of hadīth criticism that focuses on the sanad?

Before answering these questions is necessary to know the definition of science as well as the degree of truth it produces. It is also necessary to know the degree of knowledge produced by the hadīth. This is necessary so that a comparison of the levels of knowledge of the two is known, in order to clarify the limits of the scope of hadīth criticism using scientific facts.

### Science and Parameters of Truth

Science is often defined as the Science of understanding a phenomenon using experimentation (*tajrībī*), observation, and

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<sup>16</sup> Muhammad Luqman Salafī, *Ihtimām al-Muḥaddiṣīn bi Naqd Ḥadīth Sanadan wa Matnan* (Riyadh: Dar al-Da'i, 1999), 231.

<sup>17</sup> *Ibid*, 328.

<sup>18</sup> *Ibid*, 329.

analysis.<sup>19</sup> Science has an object of study in the form of things that can be sensed. Among the branches of science are biology, physics, chemistry, geology (earth science), and astronomy. Then what about the level of truth produced by science, especially from observation, analysis, and scientific experiments? Is it only assumptive, or can it reach a convincing level?

In the Islamic scholarly hadīth, the sources of knowledge are three: *khavar ṣādiq*, reason, and the senses.<sup>20</sup> *Khavar ṣādiq* is information derived from the text (the Qur'ān and hadīth). The text can provide knowledge, whether it is *qaṭ'ī* or *ẓannī*. The intellect can also produce knowledge and truth through various logical rules. Knowledge produced by the senses, including the results of experimentation and observation (*tajrībī*), is also a source of truth. The latter is what is now known as science. Islamic scholars believe that these three things are the means to achieve knowledge.

In general, the level of truth produced by science certainly cannot be divided into *qaṭ'ī* and *ẓannī*, as in the text in Islam.<sup>21</sup> However, the level of truth in science is divided into hypotheses and empirically proven theories.

A hypothesis is a conjecture that has not been proven empirically or observationally. This does not mean that it is just a baseless conjecture. Hypotheses are also built based on certain scientific principles. Meanwhile, a hypothesis continuously tested empirically and conservatively will form a scientific theory.<sup>22</sup> A scientific theory is closer to the truth than a hypothesis, but it is still assumptive.

Jamil Farid Abu Sarah, a Jordanian scholar, said that hypotheses in science are on the same level as hadīth *ẓannī*. Meanwhile, scientific theories that have been empirically proven to be true are at the level of *qaṭ'ī* hadīth.<sup>23</sup> This must be considered before applying scientific findings as a tool of hadīth criticism, for it is impossible to criticize the

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<sup>19</sup> Shahrir Mohamad Zain, *Pengenalan Sejarah dan Falsafah Sains*. (Bangi: Universitas Kebangsaan Malaysia, 1987), 6.

<sup>20</sup> Mas'ud ibn Umar Sa'd al-Din al-Taftazani, *Sharḥ al-'Aqā'id al-Nasafiyah* (Beirut: Dar Ihya al-Turats al-'Arabi, 2014), 32.

<sup>21</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajrībī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 38.

<sup>22</sup> Syarif Hidayatullah, "Agama dan Sains: Sebuah Kajian tentang Relasi dan Metodologi", *Jurnal Filsafat*, Vol. 29, No. 1, 2019. Hal. 8-9 DOI: <https://doi.org/10.22146/jf.30246>.

<sup>23</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajrībī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 39.



status of a *qaṭ'ī* hadīth with scientific findings that are still assumptive (hypothetical). What can happen, however, is an attempt to blame the *ẓannī hadīth* with more definitive scientific findings. Furthermore, we also need to know how hadīths are divided into *qaṭ'ī* and *ẓannī*.

### Division of Hadīth Based on *Qaṭ'ī* and *Ẓannī*

Based on the level of knowledge (truth) produced, the hadīths are divided into two: those that produce certain knowledge (*qaṭ'ī*) and those that are *ẓannī*. First, hadīths that produce certain truth are often termed *muḥtaff bi al-qarā'in* (hadīths that are accompanied by additional indications).<sup>24</sup> The additional indications referred to here are indications that add to the validity of the hadīth in addition to the requirements of a valid hadīth in general: a connected sanad, narrated by a ṣiḡah and *ḍābiṭ* narrator from beginning to end, without *shaḥ*, and without *'illah*.<sup>25</sup>

Additional indications beyond these initial requirements of a *ṣaḥīḥ* hadīth can increase its level of authenticity. They increase the level of knowledge and confidence generated by the hadīth. As a result, it is as if you have heard the hadīth directly from the mouth of the Prophet. Among the additional indicators of *ahad* hadīths are that they come through the narrations of al-Bukhārī and Muslim, and that they are practiced by the Imams of Hadīth and scholars.

The early scholars agreed that the hadīth *muḥtaff bi al-qarā'in* is realized in several categories of hadīth,<sup>26</sup> namely:

1. Mutawatir hadīths. Scholars agree that mutawatir hadīths are the highest level of the Prophet's hadīths. They produce knowledge that is *qaṭ'ī*.
2. Hadīth in Ṣaḥīḥ al-Bukhārī and Ṣaḥīḥ Muslim. Ibn Ṣalāḥ says in one of his books that the hadīths in these two books can be confirmed as authentic and produce certain knowledge (*naẓarī*).<sup>27</sup>

<sup>24</sup> Ali bin Sulthan al-Qari, *Sharḥ Nukhbah al-Fikr* (Beirut: Shirkah Dar al-Arqam bin Abi al-Arqam, 1994), 216.

<sup>25</sup> Asaad Rezq Ahmed al-Hawlani, "Qarā'in al-Hadīsiyyah al-Khārijiyyah wa 'Ilāqatuhā bimā Yufīduhu al-Ṣābit min Akhabār al-Aḥād", *Mizan al-Hak: Jurnal Pengetahuan Islam*, Vol. 15, 2022. Hal. 5. DOI: <https://doi.org/10.47502/mizan.1105851>.

<sup>26</sup> Ali bin Sulthan al-Qari, *Sharḥ Nukhbah al-Fikr* (Beirut: Shirkah Dar al-Arqam bin Abi al-Arqam, 1994), 218.

<sup>27</sup> Abu 'Amr Ibn Shalah, *Muqaddimah 'Ulūm al-Ḥadīth* (Beirut: Dar al-Fikr, 1986), 28.

3. They are well-known and musalsal hadīths that are practiced by the Imams of Hadīth and ḥāfiẓ.<sup>28</sup>

Secondly, the hadīths that produce the knowledge of *ẓannī*. Included in this category are sahih hadīths that do not fall under the category of *muḥtaff bi al-qarā'in* hadīths. Simply put, hadīths of *ẓannī* value are ahad hadīths with valid sanads other than the ones the author mentioned above.<sup>29</sup> Examples are the authentic hadīths in Musnad Ahmad, the books of Sunan, Muwatta', and so on.

The basic difference between a hadīth without additional indications (*ghair muḥtaff bi al-qarā'in*) and a mutawatir hadīth or a *muḥtaff bi al-qarā'in* hadīth is that it only produces assumptive knowledge, while a mutawatir hadīth or a *muḥtaff bi al-qarā'in* hadīth provides definite knowledge. In the *muḥtaff bi al-qarā'in* hadīth, the result is as if you heard the direct pronunciation of the hadīth coming out of the Prophet's mouth, but not with the hadīth without additional indications (*ghair muḥtaff bi al-qarā'in*).

### The Validity of Science as a Method of Hadīth Criticism

Contemporary scholars of hadīth differ on the validity of science as a method of hadīth criticism, with some rejecting it and others accepting it. Among the contemporary scholars of hadīth who reject its use is Abdul Qadir Arna'ut. However, what he specifically rejects is the use of science as a *critique* of ḍa'if hadīths. Arna'ut's reasons that the only thing that can corroborate the status of a hadīth is another hadīth from a different channel (*shāhid* or *tābi'*).<sup>30</sup>

Meanwhile, in general, contemporary scholars accept the findings of science as a tool for the criticism of hadīths, both for *taṣḥīḥ* and *taḍ'īf*. Some of the names in this group are Sharaf al-Qudah, Salman al-'Audah, Zaghlul an-Najjar, Said al-Mari, and Sharif Hatim al-Auni. Sharif Hatim al-Auni said that al-Bukhāri and Muslim b. Hajjaj lived in the present era, they would have been the first to construct the role of modern science as a tool of hadīth criticism.<sup>31</sup> However, when

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<sup>28</sup> Ali bin Sulthan al-Qari, *Sharḥ Nukhbah al-Fikr* (Beirut: Shirkah Dar al-Arqam bin Abi al-Arqam, 1994), 227.

<sup>29</sup> Sayyid Ali Hasan Mathar al-Hashimi, *Manhaj Naqd al-Sanad; fī Taṣḥīḥ al-Riwāyāt wa Taḍ'īfihā* (Qom: Mansyurat Nadhirin, 2008), 54.

<sup>30</sup> Abdul Qadir Arna'ut in the commentary to Muhammad ibn Abi Bakr Ibn Qayyim al-Jauziyyah, *Zād al-Ma'ād fī Hady Khayr al-'Ibād* (Beirut: Mu'assasah al-Risalah, tahkik: Syu'aib al-Arna'ut et al, 1994), 2/371.

<sup>31</sup> Sharif Hatim al-Auni in the introduction Jamil Farid Abu Sarah, *Athar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 13.

it comes to the validation (*taṣḥīḥ*) of initially weak hadīths (*naqd ijābī*), all scholars emphasize the need for strict rules. This will be discussed in the next subheading.<sup>32</sup> In conclusion, contemporary scholars generally recognize the validity of scientific findings as a tool in the method of hadīth criticism.

### The Area of Science Criticism and its Limits

One important point that needs to be highlighted in this regard is whether the role of science as a tool of hadīth criticism can stand on its own or whether it should still consider the sanad of the hadīth? That is, if a hadīth has a matan content that contradicts scientific facts, does it automatically become ḍa'īf or is it necessary to consider its sanad first?

If we look closely, hadīth criticism using science targets the matan of the hadīth. Like any other criticism, it cannot stand alone to determine whether a hadīth is authentic or *infallible*. The critique of the text of a hadīth whose content contradicts a stronger narrator (*shaykh*), for example, must still go back to the consideration of its sanad. It is necessary to find the narrator who caused the *syaz*. Thus, in the literature of turaith, we can see that the *shaz* hadīths are categorized as those with defects (ṭha'n) in their narrators.<sup>33</sup>

In general, there is no difference with the steps taken in using modern science as a tool of hadīth criticism. Since the main focus of this method of criticism is on the text of the hadīth, when the text of the hadīth contradicts scientific facts, it does not mean that the hadīth is immediately said to be ḍa'īf. The role of science here is to open up the possibility that the sanad of the hadīth needs to be recorrected by looking for possible 'illah in the sanad. If no 'illah can be found, then an attempt can be made to interpret the meaning of the hadīth so that it does not contradict modern scientific findings. If neither of these is possible, then *tawaqquf* should be used.<sup>34</sup>

This kind of critical reasoning was practiced by many of the early scholars. For example, in the Hadīth:

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<sup>32</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajrībī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 42-43.

<sup>33</sup> Muhammad ibn Abdurrahman al-Sakhawī, *Fath al-Mughīṣ bi Syarh Alfīyyah al-Ḥadīth* (Cairo: Maktabah al-Sunnah, 2003) 1/244.

<sup>34</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajrībī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 123.

"There is not born after a hundred years, a child with whom Allah has dealings."

Ibn al-Jauzy commented on the Hadīth as contradicting the reality (*wāqī'*). He says that even if the sanad of this hadīth is authentic, one should look for the possibility of *an'anah*<sup>35</sup> occurring in the middle of its sanad. The *'an'anah* has the possibility that a narrator has dropped the name of one of the liars (*kazzāb*) in the middle of the sanad. How can this Hadīth be authentic when many Imams and scholars were born after the hundredth year of Hijri?<sup>36</sup>

Meanwhile, the limit that science cannot touch in the criticism of the Prophet's hadīth is the hadīth with the content of the matan that alludes to supernatural matters, such as heaven and hell, the afterlife, and angels. Science has no room to be used as a tool to criticize these hadīths. Scholars of *Ahlusunah wal Jamaah* agree that the unseen in religious teachings cannot be reached by reason and the senses.<sup>37</sup> Science is basically an extension of the senses. It will never be able to criticize the unseen, because the senses have limits. It only reaches the physical realm, while the unseen is metaphysical.

In fact, without news from religious texts, neither reason nor the senses can describe the unseen. Even after being explained by the text, the idea of the unseen still cannot be perfectly described by the intellect or the senses.<sup>38</sup> Thus, expecting the intellect and the senses to criticize the unseen is a *cycle* in kalam science terms. The only way to know the unseen is *khbar ṣādiq*. The *qath'i proofs* from the Qur'ān or

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<sup>35</sup> *'An'anah* is a condition when there is a narrator who uses the word *عن* in the hadith chain. This is noteworthy because it holds the possibility that the narrator did not actually hear the hadith from the previous narrator.

<sup>36</sup> Abdurrahman Ibn al-Jauzy, *al-Mawdu'at* (Riyadh: Maktabah Adhwa al-Salaf, 1997), 3/129.

<sup>37</sup> Mahmud Mahir Abduh Sayyid, "Ālam al-Ghaib fī Daw' al-'Aqīdah al-Islāmiyyah", *Faculty Magazine Dirasat Islamiyyah al-Azhar University Aswan*, Vol. June, 2021. Pp. 28.

<sup>38</sup> Muhammad Said Ramadhan al-Buthy, *Kubra al-Yaqiniyyat al-Kauniyyah* (Beirut: Dar al-Fikr al-Mu'ashir, 1997) Page. 302.

the Prophet's hadīths that contain the unseen must be accepted with full confidence.<sup>39</sup>

In the context of hadīth criticism, there is an alternative method that is often considered in criticizing hadīths about the unseen, namely the *kashf* method.<sup>40</sup> It relies on the intuition of a Sufi to determine the matan of a hadīth concerning the unseen whether it agrees with their intuition or not. However, this method requires strict conditions such as the person performing the method must be a Sufi who has attained the degree of *kashf*. Also, the method applies only to *muṭṭasil* and *faḍā'il al-a'māl* hadīths.<sup>41</sup>

In the following discussion, the author will explain in more detail the rules of applying hadīth criticism using science along with its limitations and some examples. *First*, the author will discuss the *naqd ijābī* (strengthening a hadīth that has content that is in accordance with scientific facts). Then, I will continue with *Naqd Salbī* (weakening a hadīth that contradicts scientific facts).

### **Application of the *Naqd Ijabi* Rules of Science to Hadīths**

There are many facts of modern science that affirm the content of an authentic hadīth. Among the examples are the hadīths about the tailbone. In various sahih narrations, the Prophet SAW explained that the tailbone is the only member of the human body that will not be destroyed. It is from the tailbone that humans will be resurrected.

Six centuries after the Apostle said the hadīth, various scientific studies proved the truth of the content of the hadīth. Various studies conducted by burning the tailbone, showed that the cells of the tailbone remained intact. Similarly, with the second fact, science proves that the beginning of the formation of the human embryo starts from the cells of the tailbone.<sup>42</sup>

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<sup>39</sup> Mahmud Mahir Abduh Sayyid, "Ālam al-Ghaib fī Ḍau' al-'Aqīdah al-Islāmiyyah", *Faculty Magazine Dirasat Islamiyyah al-Azhar University Aswan*, Vol. June, 2021. Pg. 33

<sup>40</sup> Muhammad Kudhori, "Metode Kashf dalam Penilaian Hadis: Studi Tashih Hadis di Kalangan Kaum Sufi", *Jurnal Afkaruna*, Vol. 14, No. 1, Juni 2018. Hal. 2. DOI: <https://doi.org/10.18196/AIJIS.2018.0079>.

<sup>41</sup> Abdilllah Afabih and Viki Junianto, "Examining Ibn Arabi's Kashf Method on the Authenticity of Hadith", *Journal of al-Qur'an and Hadith Studies*, Vol. 23, No. 1, January 2022. DOI: <https://doi.org/10.14421/qh.2022.2301-06>.

<sup>42</sup> See further at Najma Ulya Ramadhani, "Tulang Ekor (Shulb) Perspektif Hadis dan Osteologi ". Thesis. UIN Alauddin Makassar. 2023.

However, the object of our study here is not a hadīth like the example above. Since the hadīth has a clear status of authenticity, the attempt to relate it to the findings of contemporary science is only to prove the *i'jāz 'ilmī* of the hadīth. The object of our study here is how modern scientific findings can elevate the status of a ḍa'if hadīth to a higher status-either hasan or sahih-when the content of the hadīth's matan is follows scientific findings. I will refer to this activity as *naqd ijābī*.

There are several things to note in practicing *naqd ijābī*:

*First*, the status of the corroborated ḍa'if hadīth is ḍa'if *yasīr* (mild), especially when the cause of its ḍa'if is a *shirk* in its matan (contradicting another stronger narration or because it contradicts reason and reality).<sup>43</sup> Thus, an ḍa'if Hadīth that is due to its narrator being a liar (*mawḍū'*), accused of lying (*matrūk*), or *munkar*<sup>44</sup> for example, will not become sahih even if it is in accordance with scientific findings.<sup>45</sup> It is not necessarily the case that the true words are those of the Prophet (pbuh). The focus of hadīth scholars in sanad criticism is to ensure that a saying can be attributed to the Prophet.

*Secondly*, the scientific findings that are used as tools of hadīth criticism are those that have been tested repeatedly empirically or observatively, not those that are still hypothetical. These scientific findings can later have the value of other narrations (shāhid) that corroborate the ḍa'if *yasīr* hadīth. Thus, it will be upgraded to *ḥasan li gayrihi* or *ṣaḥīḥ li gayrihi*.<sup>46</sup>

*Third*, the scientific facts that are used as corroboration of a hadīth are facts that were not revealed at the time of the Prophet. No one knows about these facts except the infallible Prophet.<sup>47</sup> The author will give examples of ḍa'if hadīths that cannot be corroborated by the

<sup>43</sup> Sharaf Mahmud al-Qudlah, *al-Islām wa al-'Ilm fī al-Qur'ān wa al-Sunnah*. Journal of the Faculty of Shari'ah wal Qanun, University of Qatar, Vol. 14, 1996, 35 .

<sup>44</sup> The munkar and shaykh traditions are different, although both are traditions with a narration that contradicts another stronger narration. It is just that the narrator of the *shaz* hadith is *siqah* while the narrator of the munkar hadith is ḍa'if from the very beginning. Imam Ahmad ibn Hanbal said that in a munkar tradition, it is certain that the narrator has made a mistake. While in the *shaz* hadith, the narrator may not necessarily be in error but he is *wahm* (suspected of being in error). See further at Ahmad ibn Hanbal, *al-'Ilal wa Ma'rifa al-Rijāl* (Riyadh: al-Maktabah al-Ma'arif, 1988), 120.

<sup>45</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 67.

<sup>46</sup> *Ibid.*

<sup>47</sup> *Ibid*, 93.

findings of modern science because they do not conform to the correct rules. Then, the author will also give examples of scientific findings that can be used to corroborate the status of the hadīth (*naqd ijābī*).

Among the examples of inappropriate application of *naqd ijābī* is the hadīth about fasting making one healthy.

روي عن طريق: محمد بن سليمان بن أبي داود، أخبرنا زهير بن محمد، عن سهيل بن أبي صالح، عن أبيه، عن أبيه ريرة مرفوعا، ولفظه: اغْزُوا تَغْنَمُوا، وَصُومُوا تَصِحُّوا، وَسَافِرُوا تَسْتَغْنُوا<sup>48</sup>.

The Hadīth has a problem with two of its narrators, Muhammad bin Sulaiman bin Abi Dawud and Zuhair bin Muhammad. Muhammad b. Sulaiman b. Abi Dawud was commented by Imam Nasa'i with *lā ba'sa bihi*. Abu Hatim ar-Razi called him a *munkir al-ḥadīth*.<sup>49</sup> Then, regarding Zuhair ibn Muhammad, the *nuqqād* scholars (narrator critics) differed in their opinions about him.<sup>50</sup> The hadīth has been deemed as *ḍa'īf* by al-Iraqi.<sup>51</sup>

Although the content of the Hadīth is in line with modern medical research that fasting improves health, this scientific fact cannot be used as a corroboration of the Hadīth. There are two reasons for this. *First*, the *ḍa'īf* status of the Hadīth is not *ḍa'īf yasīr* (mild). Some of the other narrations that are similar to the Hadīth are also *ḍa'īf* hadīths.<sup>52</sup> *Secondly*, the scientific fact about the relationship between fasting and health could have been a known fact at that time. Thus, it is not impossible that the expression was originally the expression of the doctors of that time.

Another example of the inappropriate application of *naqd ijābī* is the hadīth about the recommended and prohibited times of cupping by the Prophet (SAW). The recommended times are on the 17th, 19th or 21st of each lunar month. The various hadīths that explain this are

<sup>48</sup> The hadīth was narrated by Muhammad ibn 'Amr al-'Uqaili, *al-Ḍu'afā' al-Kabīr* (Beirut: Dar al-Maktabah al-Ilmiyyah, 1980), 3/92. , Sulaiman ibn Ahmad al-Thabrani, *al-Mu'jam al-Awsaṭ* (Cairo: Dar al-Haramain, 1995), 8/174 .

<sup>49</sup> Ahmad bin 'Ali Ibn Hajar al-Asqalani, *Tahzīb al-Tahzīb* (India: Da'irah al-Ma'arif al-'Uthmaniyyah, 1943), 9/200.

<sup>50</sup> *Ibid*, 3/350.

<sup>51</sup> Abdurrahim ibn al-Husain al-'Iraqi, *al-Mugni an Ḥaml al-Asfār fī al-Asfār fī Takhrīj Mā fī al-Iḥyā' min al-Akḥbār* (Beirut: Dar Ibn Hazm, 2005), 973.

<sup>52</sup> Ahmad bin 'Ali Ibn Hajar al-Asqalani, *Tahzīb al-Tahzīb* (India: Da'irah al-Ma'arif al-'Uthmaniyyah, 1943), 9/200.

all ḍa'īf. This is as al-'Uqaili says in his book, *al-Dhu'afa' al-Kabir*.<sup>53</sup> Ibn Hajar al-'Asqalani also said that none of the ḥadīths in this chapter (the recommended and prohibited times of cupping) are authentic.<sup>54</sup>

Some researchers were interested in proving whether cupping at these times has a different effect. The result is that cupping on these dates has a more significant positive impact on the body than other days. However, this does not mean that the results of scientific research can be used as a tool to corroborate the above ḍa'īf ḥadīth about cupping.

This is because cupping was a well-known health technique among the Arabs at that time. It is possible that the best days for cupping have been known for a long time. Even long before the Arab civilization, there were formulas about cupping in China, one of which included the best time for cupping.

Having seen examples of scientific findings that cannot be used as indications to corroborate the ḥadīth, the author next presents examples of ḍa'īf ḥadīths that can be corroborated by scientific findings. The first is the Ḥadīth about the creation of a child through a sperm cell and an egg cell.

حدثنا حسين بن الحسن حدثنا أبو كدينة عن عطاء بن السائب عن القاسم بن عبد الرحمن عن أبيه عن عبد الله قال: "مر يهودي برسول الله صلى الله عليه وسلم وهو يحدث أصحابه فقالت قريش يا يهودي! إن هذا يزعم أنه نبي فقال لأسأله عن شيء لا يعلمه إلا نبي قال فجاء حتى جلس ثم قال يا محمد! مم يخلق الإنسان؟ قال يا يهودي! من كل يخلق من طفة الرجل ومن طفة المرأة فأما نطفة الرجل فنطفة غليظة منها العظم والعصب وأما نطفة المرأة فنطفة رقيقة منها اللحم والدم فقام اليهودي فقال هكذا كان يقول من قبلك .<sup>55</sup>

The above Ḥadīth generally explains that one day, a Jew wanted to test the Prophet with a question. He asked about the origin of the formation of the fetus, where the answer is only known by people who are truly prophets. The Prophet SAW answered that the formation of

<sup>53</sup> Muhammad ibn 'Amr al-'Uqaili, *al-Du'afā' al-Kabīr* (Beirut: Dar al-Maktabah al-Ilmiyyah, 1980), 1/150.

<sup>54</sup> Ahmad ibn 'Ali Ibn Hajar al-Asqalani, *Fath al-Bāri* (Beirut: Dar al-Ma'rifah, 1960), 10/149.

<sup>55</sup> Ahmad ibn Hanbal, *al-Musnad* (Beirut: Mu'assasah al-Risalah, 2001), 7/437 . Ahmad ibn Shu'aib al-Nasa'i, *al-Sunan al-Kubrā* (Beirut: Mu'assasah al-Risalah, 2001), 8/221 .



a child is through the two *nutfah of a* man and a woman, or a sperm cell and an egg cell. The problem is that there are two *illahs* in the above hadīth:

1. 'Atha' ibn Saib experienced *ikhḥilāt*<sup>56</sup> at the end of his life. Meanwhile, it is not certain whether Abu Kudainah narrated from him before the *ikhḥilāt* or afterwards.<sup>57</sup>
2. As for 'Abdur-Rahmān b. 'Abdur-Rahmān b. Mas'ud, it is not certain whether he actually heard the hadīth from his father since he heard only a few reports from him. His father died when Abdur-Rahmān was six years old and it is not known whether he heard this hadīth or not.<sup>58</sup>

In terms of its chain of transmission, some say it is ḍa'īf, such as Imam Ahmad.<sup>59</sup> Ali ibn Abu Bakr al-Haitami, on the other hand, said that the *rijāl* in the chain of transmission were *'siqah* as stated by Ibn Hibban, but Atha' ibn Saib was *in conflict*.<sup>60</sup> Thus, when the hadīth is said to be ḍa'īf hadīth, its level of ḍa'īf can be classified as ḍa'īf *yasīr* (mild). Thus, modern scientific findings can be used as a corroborating indication (*qārīnah*) just like the narrations from other channels (*mutāba'āt*) to eliminate the *wahm* in the Hadīth.

Several centuries after the Hadīth was uttered, what the Prophet said was proven through various scientific findings, that the formation of the fetus is a combination of male sperm and egg. Medical science at that time still believed that the formation of a fetus was purely from male sperm alone, without interference from the egg.<sup>61</sup> So these findings can be one of the indications (*qārīnah*) to eliminate *wahm* from some of the narrators contained in the hadīth sanad. This is also

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<sup>56</sup> *Ikhtilāt* is the condition of an *siqah* narrator who loses the trait of ḍabit, either due to senility or because his book is lost. Those who narrate from him when he has suffered from *ikhḥilāt*, their narration becomes an *inferior* tradition. On the other hand, when it is not known whether he narrated before the conflict or after it, his report will also be ḍa'īf. Unless there is a clear statement from him that he narrated from a *mukhtaliḥ* before the *ikhḥilāt*. In that case, his report will be accepted.

<sup>57</sup> Ahmad ibn 'Ali Ibn Hajar al-Asqalani, *Tahẓīb al-Tahẓīb* (India: Da'irah al-Ma'arif al-'Uthmaniyyah, 1943), 7/206.

<sup>58</sup> *Ibid*, 7/216.

<sup>59</sup> Ahmad ibn Hanbal, *Masā'il Ahmad ibn Hanbal* (Beirut: al-Maktab al-Islami, 1980), 234.

<sup>60</sup> Ali ibn Abi Bakr al-Haitami, *Majma' al-Zawā'id wa Manba' al-Fawā'id* (Cairo: Maktabah al-Qudsi, 1994), 241.

<sup>61</sup> Zaghlul al-Najjar, *al-Ijāz al-'Ilmi fī al-Sunnah al-Nabawiyyah* (Cairo: Nahdlah Misr, 2012), 200-206.

reinforced by the fact that the scientific fact is in accordance with the Qur'anic verse.<sup>62</sup>

Here, we see that science has a role to play in correcting the degree of the hadīth. Science cannot directly judge that the hadīth is authentic. However, it has the role of demanding that we reconsider the possibility that some of the *'illah* or problematic narrators could have been eliminated due to some factors.

The second example of the use of scientific facts as corroboration of hadīth is in the hadīth that under the sea there is fire.

(عن صالح بن عمر وعبد الرحيم بن سليمان والليث بن سعد إسماعيل بن زكريا) أربعتهم عن مطرف عن بشر أبي عبد الله عن بشير بن مسلم عن عبد الله بن عمرو رضي الله عنهما أنه قال: قال رسول الله صلى الله عليه وعلى آله وسلم: لا يَرَكُبُ الْبَحْرَ إِلَّا حَاجٌّ أَوْ مُعْتَمِرٌ أَوْ غَازٍ فِي سَبِيلِ اللَّهِ فَإِنَّ تَحْتَ الْبَحْرِ نَارًا وَتَحْتَ النَّارِ بَحْرٌ.<sup>63</sup>

There are two *illahs* in the Hadīth:

1. There is *idtirāb*<sup>64</sup> in the sanad of the hadīth. There is another narration with a different sanad, that of Mutharraḥ from Bashir b. Muslim from a man (رجل) from Ibn 'Amr b. al-'Ash. Another narration says from Bashir that he got the hadīth from a man (يلغه) from Ibn 'Amr b. al-'Ash. Another narration says that the hadīth is *mawqūf*.<sup>65</sup>
2. Bashir ibn Muslim al-Kindi, he is *majhūl ḥāl*. The scholars of *jarḥ wa ta'dīl* did not address whether he was *ṣiqāḥ* or ḍa'īf.<sup>66</sup>

<sup>62</sup> This is by surah al-Thariq verses 6-7 and al-Insan verse 2.

<sup>63</sup> The narration of the first three narrators: Shalih ibn Umar, Abdurrahim ibn Sulaiman, and al-Laits ibn Sa'd with the sanad narrated in Ahmad ibn 'Ali al-Khatib al-Baghdadi, *Talkhīṣ al-Mutasyābih fī al-Rasm* (Damascus: Dar al-Qadiri, 1985), 1/156-158., Ahmad ibn al-Husain al-Baihaqi, *al-Sunan al-Kubrā* (Beirut: Dar al-Kutub al-'Ilmiyyah, 2003), 6/18. While the narration from Ismail bin Zakaria with the sanad is narrated in Said bin Manshur, *al-Sunan* (India: al-Dar al-Salafiyyah, 1982), 2/187. Sulaiman bin al-Ash'ats Abu Dawud, *al-Sunan* (Beirut: al-Maktabah al-'Ashriyyah, 2014) No. 2489. Sulaiman ibn Ahmad al-Thabrani, *al-Mu'jam al-Kabīr* (Cairo: Maktabah Ibn Taymiyyah, 1994), 13/584.

<sup>64</sup> *Idtirāb* means a contradiction between two traditions, where the contradiction is unavoidable, thus necessitating *tawaqquf*.

<sup>65</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 166-167.

<sup>66</sup> Ahmad bin 'Ali Ibn Hajar al-Asqalani, *Tahzīb al-Tahzīb* (India: Da'irah al-Ma'arif al-'Uthmaniyyah, 1943), 1/467.

Modern scientific findings in the field of geology prove that there are actually craters of fire (lava) under the oceans. This is often known as the *ring of fire*, which is a number of volcanic areas under the ocean. Such findings can serve to strengthen the status of the above Hadīth. This is because the ḍa'īf status of the Hadīth is mild, namely the *jahālah* of Bashir ibn Muslim. Yet Ibn Hibban included it in his book *al-Ṣiqāt*.<sup>67</sup>

As for the *iqṭirāb* occurring in the hadīth chain, it is basically not the cause of the hadīth being rejected (*mardūd*), but rather the cause of the tawaqquf (withholding) of the hadīth. By using scientific findings, we can be sure that the problems in the hadīth chain can be eliminated and the status of the hadīth can be changed to *sahih*.<sup>68</sup>

These examples are just a few of the hadīths that can be reviewed for their authenticity using the findings of modern science. Of course, there are many more hadīths that can be scrutinized using scientific findings. However, the author cannot mention all of them. This is because the author's focus in this article is only on trying to offer a discourse of hadīth criticism using scientific findings.

### Application of the *Naqd Salbi* Rules of Science to Hadīths

If we have previously discussed how scientific facts can be used as a tool to corroborate a ḍa'īf *hadīth* (*naqd ijbābī*), we will now discuss the limits and rules of using science to weaken a hadīth.

A hadīth can be weakened if it contradicts scientific facts. However, in the rules of application, we need to pay attention to the degree of the hadīth and the level of the scientific fact that is used as a comparison. There are only four possibilities that can occur when a hadīth contradicts scientific facts, viz:<sup>69</sup>

1. A *qaṭ'ī* or scientifically sound hadīth (i.e., Hadīth *muḥtaff bi al-qarā'in*) contradicts the findings of science that have been empirically tested over and over again through various observations.
2. Hadīths with scientific value (*muḥtaff bi al-qarā'in*) contradict scientific findings that are still hypotheses or theories that have

<sup>67</sup> Muhammad Ibn Hibban, *al-Ṣiqāt* (India: Da'irah al-Ma'arif al-Uthmaniyyah, 1973), 6/100.

<sup>68</sup> Ahmad bin Hasan al-Haritsi, *Al-Aḥādīs al-Nabawiyyah Allatī istadalla bihā 'alā al-I'jāz al-'Ilmi fī al-Insān wa al-Arḍ wa al-Falak Jam'an wa Dirāsatan* (Ministry of Higher Education, Kingdom of Saudi Arabia, 2010) 429.

<sup>69</sup> Jamil Farid Abu Sarah, *Athar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 120.

not been tested by various empirical experiments and observations.

3. The *ẓannī* hadīth (not the *muḥtaff bi al-qarā'in hadīth*) contradicts the findings of science that have been tested repeatedly empirically and through various observations.
4. The *ẓannī* hadīth contradicts scientific findings that are still hypothetical and untested.

The author will explain how to deal with these four conditions.

**First**, when there is a conflict between a *qaṭ'ī* or scientifically sound hadīth (hadis *muḥtaff bi al-qarā'in*) and scientific findings that have been empirically tested repeatedly and through various observations. So far, this has never happened and will never happen. Because two things that are *qaṭ'ī* will not contradict each other. Ibn Taymiyyah said that two things that are *qaṭ'ī* will not contradict each other, whether they are *sam'ī* or both *'aqlī*, even when one is *sam'ī* and the other *'aqlī*.<sup>70</sup>

**Second**, when there is a conflict between a *qaṭ'ī* or scientifically sound hadīth (hadis *muḥtaff bi al-qarā'in*) and scientific findings that are still hypotheses or theories that have not been proven empirically correct. In such a situation, scholars agree that the science cannot be used as an indication to weaken the status of the hadīth.<sup>71</sup>

**Third**, the situation when the *ẓannī hadīth* (not the *muḥtaff bi al-qarā'in hadīth*) contradicts science that has been empirically tested over and over again. In addressing such a situation, there are several methods to address the two sources of knowledge (hadīth and science).

If there is a hasan or sahih hadīth, but not a *muḥtaff bi al-qarā'in* and it contradicts a definite scientific fact, then we should look for a possible *'illah* in the sanad of the hadīth. If not, then by trying to understand the text of the hadīth with a meaning that is in accordance with the findings of science. Or it can be said by interpreting the meaning of the hadīth so that it does not contradict the scientific truth.

An example of the application of this rule is the Hadīth about the jinn's sting.

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<sup>70</sup> Ahmad bin Abdul Halim Ibn Taimiyah, *Dar' Ta'āruḍ al-'Aql wa al-Naql* (Riyadh: Muhammad bin Su'ud Islamic University, 1991), 1/79 .

<sup>71</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 123.

حَدَّثَنَا مُحَمَّدُ بْنُ جَعْفَرٍ قَالَ: حَدَّثَنَا شُعْبَةُ، عَنْ زِيَادِ بْنِ عِلَاقَةَ قَالَ: حَدَّثَنِي رَجُلٌ مِنْ قَوْمِي، قَالَ شُعْبَةُ: قَدْ كُنْتُ أَخْفِظُ اسْمَهُ، قَالَ: كُنَّا عَلَى بَابِ عُثْمَانَ رَضِيَ اللَّهُ عَنْهُ نَنْتَظِرُ الْإِذْنَ عَلَيْهِ، فَسَمِعْتُ أَبَا مُوسَى الْأَشْعَرِيَّ يَقُولُ: قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ: (فَنَاءُ أُمَّتِي بِالطَّعْنِ، وَالطَّاعُونَ. قَالَ: فَقُلْنَا: يَا رَسُولَ اللَّهِ، هَذَا الطَّعْنُ قَدْ عَرَفْنَاهُ، فَمَا الطَّاعُونَ؟ قَالَ: " طَعْنُ أَعْدَائِكُمْ مِنَ الْجِنِّ، فِي كُلِّ شَهَادَةٍ<sup>72</sup>).

The *madār*<sup>73</sup> of the hadīth is Ziyad b. 'Ilaqah. There are several narrators who narrated from Ziyad bin 'Ilaqah, namely Abu Bakr an-Nahshali,<sup>74</sup> Hajjaj bin Arthah,<sup>75</sup> Abu Hanifah,<sup>76</sup> Abu Shaibah,<sup>77</sup> and abu Maryam Abdul Ghaffar bin al-Qasim.<sup>78</sup> Of these narrations the one from Abu Bakr an-Nahshali is the strongest. Ibn Hajar also said that the hadīth with this text is sahih without any doubt.<sup>79</sup>

In addition to Ziyad ibn 'Ilaqah, several Imams such as Ahmad, al-Bazzar, ar-Rawyyani, and al-Hakim narrated from other sources, as follows:

(عن أبي عوانة وأبي يونس حاتم بن أبي صغيرة) كلاهما عن أبي يلج عن أبي بكر ابن أبي موسى عن أبيه.

Some scholars say that the hadīth is sahih, such as adz-Dzahabi, al-Hakim, and al-Albani.<sup>80</sup>

<sup>72</sup> Ahmad ibn Hanbal, *al-Musnad* (Beirut: Mu'assasah al-Risalah, 2001), 32/520.

<sup>73</sup> A hadīth *madār* is a narrator who is at the center of the hadīth transmission. After this *madār* the hadīth transmission line branches out into two or more lines.

<sup>74</sup> Ahmad b. Hanbal, *al-Musnad* (Beirut: Mu'assasah al-Risalah, 2001), 32/520. Ahmad b. 'Ali Abu Ya'la, *al-Musnad* (Damascus: Dar al-Ma'mun, 1984), 13/194, Ahmad b. 'Amr al-Bazzar, *Baḥr Zakhkhār* (Medina: Maktavah al-'Ulum wa al-Hikam, 1988), 8/16.

<sup>75</sup> Sulaiman ibn Ahmad al-Thabrani, *al-Mu'jam al-Awsaṭ* (Cairo: Dar al-Haramain, 1995), 8/239.

<sup>76</sup> Ahmad ibn Abdillāh Abu Nu'aim, *Musnad Abī Hanīfah Riwayah Abī Nu'aym* (Riyadh: Maktabah al-Kautsar, 1994), 105.

<sup>77</sup> 'Ali ibn 'Umar al-Dar al-Quthni, *al-'Ilal al-Wāridah fī al-Aḥādīs al-Nabawīyyah* (Riyadh: Dar Thaybah, 1985), 7/257.

<sup>78</sup> *Ibid.*

<sup>79</sup> Ahmad ibn 'Ali Ibn Hajar al-Asqalani, *Baḥl al-Ma'ūn fī Faḍl al-Ṭā'ūn* (Cairo: Maktabah al-Tau'iyyah al-Islamiyyah, 1993), 58.

<sup>80</sup> Muhammad Nashiruddin al-Albani, *Irwā' al-Galīl fī Takhrīj Ahādīs Manār al-Sabīl* (Beirut: al-Maktab al-Islami, 1985), 6/72.

With a sahih sanad according to some scholars, the hadīth contradicts the empirical fact that the cause of an epidemic is a disease that spreads through contagion. This is in contrast to the text of the Hadīth, which states that the plague is caused by the jinn - in the wording of the Hadīth it uses the word jinn sting. In response to this, there are two things we can do: either interpret the meaning of the hadīth to fit the scientific truth or re-examine the possible 'illah in the sanad.

*The first* is to interpret the meaning of the hadīth. There are previous scholars who have tried to interpret the hadīth in a way that does not contradict scientific facts, namely Ibn Qayyim al-Jauziyah. He interpreted that the cause of the plague is twofold: the sensory cause and the supernatural cause. The sensory cause of ṭa'ūn is the transmission of disease from one person to another. Meanwhile, the supernatural cause is the jinn as in the wording of the hadīth. The one who transmits the disease from one person to another is the jinn.<sup>81</sup>

However, Jamil Farid Abu Sarah, a contemporary Jordanian hadīth scholar, rejects this interpretation of the above hadīth. This is because there is an attempt to mix empirical interpretation (science) with supernatural interpretation, which is too forced. Thus, it is more appropriate to use another way of dealing with the contradiction between the *ẓanni hadīth* and the definite scientific facts in this example, which is by re-examining the possible 'illah in the hadīth.<sup>82</sup>

*Secondly*, looking for the possible 'illah in the hadīth - regardless of the opinion of those who authenticate it. There are two narrators who come under scrutiny from the two channels of transmission of the above hadīth about ṭa'ūn, namely Abu Bakr an-Nahshali and Abu Balj al-Fazari.

1. Abu Bakr an-Nahshali has been *condemned* by some hadīth critics (*nuqqād*). Among those who have labeled him *as da'īf* is Abu Hatim.<sup>83</sup> Ibn Hibban said that he was among those who often erred in narrating hadīths.<sup>84</sup>

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<sup>81</sup> Muhammad ibn Abi Bakr Ibn Qayyim al-Jauziyah, *Zād al-Ma'ād fī Hady Khayr al-'Ibād* (Beirut: Mu'assasah al-Risalah, 1994), 3/36.

<sup>82</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Hadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 201.

<sup>83</sup> Abdurrahman ibn Muhammad Ibn Abi Hatim, *al-Jarḥ wa al-Ta'dīl* (Beirut: Dar Ihya' al-Turats, 1952), 9/344.

<sup>84</sup> Muhammad Ibn Hibban, *Al-Majrūhīn min al-Muhaddisīn wa al-Ḍu'afā' al-Matrūkīn* (Aleppo: Dar al-Wa'y, 1976), 3/145.

2. Then Abu Balj al-Fazari is a narrator who was condemned by Ibn Abdul Barr and Ibn Jauzi. Ibn Hibban said he made many mistakes (*yukhṭi*).
3. There is an *idṭirab* in the chain of transmission of the hadīth from Ziyad b. 'Ilaqah. There are many differences in the narrators between Ziyad b. 'Ilaqah and Abu Musa al-Ash'ari. This is also an indication that the possibility of narrator error is stronger when attributing this hadīth to the Prophet.<sup>85</sup>

Among the other indications that strengthen the possibility of narrator error in attributing the hadīth to the Prophet is that the belief in the emergence of ṭa'ūn from the jinn's sting was already a hadīth in the Jahiliyya Arab society.<sup>86</sup> This fact further strengthens the possibility of the narrator's error in attributing the vow to the Prophet. This is because this hadīth ultimately cannot fall into the category of the unseen, which is only known to the Prophet as God's chosen figure.

The above Hadīth also contradicts the wording of several other stronger Hadīths about the cause of ṭa'ūn being contagion. Thus, it is possible that the statement came from a Companion or an isra'iliyyat story, then there was a false narrator who attributed it to the Prophet. As a result, scientific findings on this issue can weaken the status of the hadīth.<sup>87</sup>

The **fourth** situation is when there is an *ẓannī* hadīth that seems to contradict scientific findings. However, these findings are not empirically confirmed (still hypothesized). It can be said that this fourth form of contradiction between hadīth and science is the one that has been debated for a long time because it is not easy to judge between two things that are *ẓannī*. Some steps that can be taken are to interpret the hadīth with an interpretation that does not conflict with science or *tawaqquf*.

An example is the Hadīth about the height of Prophet Adam AS which is very different from the size of a normal human being today. Meanwhile, science says that there has been no significant change in size between the earliest humans and today. The scientific hypothesis

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<sup>85</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 202.

<sup>86</sup> Jawad 'Ali, *al-Mufaṣṣal fī Tārīkh al-'Arab qabla al-Islām* (Beirut: Dar al-Saqi, 2001), 16/40.

<sup>87</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 202.

is an extension of the theory of evolution which is still not firmly proven.

عن أبي هريرة رضي الله عنه عن النبي صلى الله عليه وسلم قال : (خلق الله آدم وطوله ستون ذراعًا ، ثم قال : اذهب فسلم على أولئك من الملائكة فاستمع ما يحيونك ، فإنها تحيتك وتحية ذريتك . فقال السلام عليكم فقالوا : السلام عليكم ورحمة الله . فزادوه : ورحمة الله فكل من يدخل الجنة على صورة آدم ، فلم يزل الخلق ينقص حتى الآن ) . رواه البخاري (٣٣٣٦)<sup>٨٨</sup>

The hadīth was narrated by al-Bukhārī in Ṣaḥīḥ al-Bukhārī. However, of the various narrations in Ṣaḥīḥ al-Bukhārī, the mention of the word *ستون ذراعًا* only comes from the narration of Abu Zur'ah bin 'Amr bin Jarir.<sup>89</sup> Meanwhile, several other routes such as from al-A'raj,<sup>90</sup> Abdurrahman bin Abi 'Amrah,<sup>91</sup> and Hamam bin Munabbih<sup>92</sup> do not mention the phrase.

*The ḡanni* of the Hadīth is the certainty of the *ذراعًا ستون*. Although the Hadīth was narrated by al-Bukhārī, it does not mean that the additional pronunciation is definitely correct. This is because sometimes the purpose of al-Bukhārī's narration of a hadīth in Ṣaḥīḥ al-Bukhārī is to declare that the hadīth is authentic, not specifically to determine that a particular phrase in it is the most correct.<sup>93</sup>

The content of the Hadīth which states that the height of the prophet Adam AS was sixty *zira'* (about 37 meters) is *ḡanni*. Until now there is also no definite scientific fact about the size of humans at that time. In general, how many scientific findings related to it are still hypotheses, for example Darwin's theory of evolution.<sup>94</sup> So, some ways to solve it are by plural or *tawaqquf*.

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<sup>88</sup> Muhammad ibn Ismail al-Bukhari, *al-Jāmi' al-Ṣaḥīḥ*, chapter *khalq Ādām* (Riyadh: Dar Thuq al-Najah, 2001), No. 3327.

<sup>89</sup> Hadith No. 3327

<sup>90</sup> Hadith No. 3246

<sup>91</sup> Hadith No. 3254

<sup>92</sup> Hadith No. 3245

<sup>93</sup> Jamil Farid Abu Sarah, *ṣar al-'Ilm al-Tajribī fī Naqd al-Ḥadīth al-Nabawī* (Beirut: Markaz Nama', 2016), 137.

<sup>94</sup> Harun Yahya, "The Collapse of the Theory of Evolution" (Bandung: Dzakra, 2000, translated: Catur Sriherwanto et al.), 11.



The way to pluralize or compromise the hadīth with the scientific hypothesis as above is by interpreting that what is meant by the hadīth about Prophet Adam's height of sixty *zīrā'* is when he was in heaven. After he was brought down to earth, his size became the size of a human being today. Then, when one day he returns to heaven, his size will be sixty *zīrā'* again.<sup>95</sup>

When it is not possible to reconcile the hadīth with the scientific findings, the way to deal with it is *tawaqquf* (to stop looking for the intended meaning until there is a helpful indication). The *tawaqquf* method was also practiced by Ibn Taymiyyah when he encountered a *ẓanni* hadīth whose meaning was not yet known by scientific findings at the time. For example, the Hadīth about male and female sperm that can determine the sex of the fetus.

ماء الرجل أبيض وماء المرأة أصفر، فإذا اجتمعا فعلا مني الرجل مني المرأة أذكرا بإذن الله، وإذا علا مني المرأة مني الرجل أنثا بإذن الله.

The Hadīth says that between the two semen, the male or female is superior (*'ala*), so it will determine the sex of the fetus. However, the meaning (*dilālah*) of the hadīth is still assumptive (*ẓanni*). The word علا has many meanings, it can be first, stronger, superior, and so on. Meanwhile, science has not been able to answer how far the influence of male semen (X chromosome) and female semen (Y chromosome) on the sex of the child. So, Ibn Taimiyah *tawaqquf* in this matter.<sup>96</sup>

These examples of the application of the role of science as a tool in hadīth criticism are only a small part of the hadīths that need to be reviewed in light of contemporary scientific findings. The author cannot mention them in their entirety. This is because the author's purpose here is only to present the idea of how modern scientific findings can be used as a tool for criticizing the Prophet's hadīth.

## CONCLUSION

We cannot outright reject the validity of scientific findings to scrutinize the status of a hadīth on the grounds that the hadīth came from the infallible while scientific findings are assumptive. Both

<sup>95</sup> Muhammad Anwar Shah al-Kasymiri, *Fayḍ al-Bāri* (Beirut: Dar al-Kutub al-Ilmiyyah, 2005), 4/342-343.

<sup>96</sup> Muhammad ibn Abi Bakr Ibn Qayyim al-Jauziyyah, *I'lām al-Muwaqqi'īn* (Beirut: Dar Ibn Hazm, 2019), 4/207.

(science and hadith) are sources of knowledge that are recognized by Muslim scholars. So, when there is a contradiction, there is certainly something that needs to be corrected. Then there needs to be a methodological construction that can organize and resolve the conflict. That is where the idea of using scientific findings as a tool in hadith criticism came from.

Two conditions are possible. *First*, when there is an authentic Hadith that contradicts the findings of science. *Secondly*, when there is a text of a ḍa'īf hadith that agrees with the findings of science. These two situations call for a reexamination of the sanad of these hadiths. In the first case, it is necessary to review the presence of the *'illah* or *the* possible cause of the ḍa'īf *in* the hadith's sanad. In the second case, it is necessary to review the possibilities that can remove the ḍa'īf status of the hadith's sanad.

In the first case, the status of a hadith may change from authentic to ḍa'īf. In the second case, the ḍa'īf hadith may also become authentic. Both processes involve the role of modern scientific findings. Simply put, this is how science works in the activity of criticizing the Prophetic hadiths.

The author feels that, at present, it is quite important to formulate the rules for the application of scientific findings as a tool of hadith criticism. It is also proof that Islam is a religion that is always suitable for all places and all eras. Today is an era where we encounter many scientific findings due to technological advances. Thus, to prove the universality of hadith, there is no reason to reject these findings as a means of evaluating the Prophet's hadith.

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