如何撰写独特的科学论文

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科学，是共同合作努力得到的结果。现今科学家的工作是以过去几代科学家工作为基础。例如，如果没有Carl Linnaeus1以及跟随在他之后对那些成千上万种物种命名的人们，那么今天，比如当一个生态学家要发表一篇新的研究时，就不得面临试图描述森林中每一个物种。然而，我们作为科学家，在他人研究基础上进行研究时，我们必须认识到他人的工作成果，而不是将它作为自己的研究成果来发表。就如，Linnaeus 用我们所知的Acer rubrum L.
来表述红色的枫叶树。学名指明名字来源于哪位科学家， 在这个例子中，L.
就象征了Linnaeus是第一个描述这个物种的人。

当准备一篇科研文章时，科学家经常适当的引用在一些前人的经验或者是成果。引用他人的工作是绝对必要的，尽管在提及其他科学家工作时要指明一定的出处。科学家很快熟悉一些指明出处的常用方法，包括在新发表的研究中。例如，以下这位作者在他发表的文章中引用了他教授的工作

“ Smith published county record dot maps for 2,469 taxa of vascular plants (1988)[2], and Keys to the Flora of Arkansas (1994)[3]. ”

注意，在这里有两种引用。 原书将日期放在括号中，而此文采用的是不同的引用方式，是使用序列号来引用文章。我们在此结合了两种引用方式，既保留了原来文章的格式，又同时使用了现在文章的编号方法.

如果科学家要参考他人的工作，那么是不是就是抄袭呢?维基百科5将抄袭定义为“ 非法占有，和偷取并且将他人的语言，思想，观念，或表达方式作为自己的原创出版 ”，因为，抄袭可以简单定义为使用别人的写作，并且使它显得是你独立准备材料的。

上述Hyatt的引证提供了很好的一个例子，表达了如何正确使用其他科学家的工作
这位作者对另一位作者先前所做的工作指明了出处。

如果Hyatt要抄袭Smith的工作成果，他可以简单地做出上述陈述而不给出这些工作是Smith所做的。例如，他可以这么表达：

“ A total of 2,469 vascular plant taxa are known to occur in the state of Arkansas.

可以清楚地看到，这样就可能导致抄袭。Hyatt去除了这项成果是来源于Smith的，并且使其看上去是Hyatt自己独立鉴定了2469种长在美国阿肯色州的植物。显然，如果一位作者想要基于别人

的工作给出一个陈述，他应该在这项工作处创建一个引用，并且在参考文献列表中列明出处。

大多数期刊都要求摘要部分不能包含参考文献和引用。在某种程度上，摘要是有关剽窃的规则的例外。摘要只是提供了一个研究的简短总结;前期工作的引用几乎是在文章的研究部分。事实上，经过四年全职编辑科研论文的经验，笔者还没有看到过在摘要中存在引用的情况。一般来说，大多数的引用出现在序言和讨论部分。尽管，结果部分往往涉及设备的制造商或软件制造商和一些少数的其他引用。甚至有时结论部分可能需要引用前人的工作。

如果引用别人的工作是这么容易的一件事情，为什么期刊仍旧非常坚持他们不会接受带有抄袭的文章。有时候，有的作者可能会走捷径，使用一些其他作者在自己的论文的描述。 如果这样的描述不带有引用，这可能就是抄袭。在先前的例子中，作者可能错误的使其变成他自己独立鉴定了2469种长在美国阿肯色州的植物，然而事实上并不是Haytt完成的，而是Smith完成的。

因此，在准备一片文章时，要仔细检查，是否所有在文中提及的他人所完成的工作或者是数值数据都给出了出处。这也适用于你使用了一些与他人一样的技术，并且在文中想要详细的描述表达出来。两个特定情况下适用于这里。如果你使用以前的作者的措辞，并引用了作者的研究论文。另外，如果你使用以前的作者的思想或方法，你仍然需要引用他们的研究，即使你使用完全不同的措辞，就像我们例子中的with 2,469 species。

第二种类型的抄袭称为自我抄袭。自我抄袭有多种表现方式。最明显的例子就是将一篇稿件同时提交到两个不同的期刊。期刊不想话费自己的时间和精力去分析你的研究论文，并且通过后准备出版，却发现你已经将文章投稿到另一个更快通过并且发表你文章的期刊。虽然从技术上来说这可能不能被称为自我剽窃，但是一份相同的稿件同时提交到两个不同的期刊是非常不合适的行为。

有时候，作者可能会从自己已经出版的文中提取出一些数据信息，包括完整的句子。这看上去好像不是件坏事，毕竟，文章时你写的，为何不能使用自己的数据信息呢?答案很简单，你可以使用这个数据信息，但是你必须认识你的工作成果已经在某期刊被发表过了。不要尝试在同一个数据和观念上发表两篇稍有不同的文章而不做出引文。在同一主题上发表一些列的文章是可以的。这是经常发生的，但是，和其他文章一样，作者要记住给出已经发表的材料出处。

最后，不管你是引用的句子，段落，或整个文章的方法部分。你可能需要独立编写和使用独特的数据或承认你是使用先前公布的信息。如今，出版商可以使用软件来检测论文的重复率来判定剽窃行为，包括自我剽窃。

如今，甚至是对于一些高层的政治人员而言，事业会因为抄袭而被轻易摧毁6。准备引文和添加参考文献列表时非常简单和容易做到的。不要因为你忘了指明那些为您工作奠定了基础的科学家们包括你自己出处，而是你的事业遭受重创。

References

2. Smith, E. B. 1988. An atlas and annotated list of the Flora of Arkansas. Published by the author.

3. Smith, E. B. 1994. Keys to the Flora of Arkansas. University of Arkansas Press. Fayetteville, Arkansas, USA.

4. Hyatt, P. E. 1998. Arkansas Carex (Cyperaceae): A briefly annotated list. Sida, Contributions to Botany

18:535 – 554.

此短文由LetPub美国总公司的科学编辑撰写，英文原文如下：

How to Write Unique Scientific Papers:

Quoting Without Plagiarizing:

Outline:

I: Introduction: Good versus bad.

A: How are quotations use appropriately?

B: What is plagiarism?

II: Body.

A: Using quotations appropriately.

B: Two kinds of plagiarism.

1: Plagiarism of others.

2: Self-plagiarism.

III: Conclusions.

How to Write Unique Scientific Papers:

Quoting Without Plagiarizing

Science is a cooperative effort. Scientists of today build on the work of generations past scientists. Without the work of Carl Linnaeus1 and those that followed him in naming hundreds of thousands of species, for example, an ecologist today would be faced with attempting to describe every species in a forest when a new research paper is published. However, when we as scientists depend on the work of others we need to recognize their work and not publish it as our own. For example, Linnaeus described the red maple tree using the name we now write as Acer rubrum L. Scientific names give credit to the author of the name. In this case, the L. indicates that Linnaeus was the first person to describe this species.

?????? When preparing a scientific research paper scientists often properly use the work of scientists who have gone before them. Using the work of others is absolutely necessary, although authors should give credit when they refer to the work of other scientists. Scientists quickly become familiar with the usual methods of getting someone credit for information that they include in newly published research studies. For example, the present author cited the work of his professor in a published paper as follows2:

Smith published county record dot maps for 2,469 taxa of vascular plants (1988)[2], and Keys to the Flora of Arkansas (1994)[3].4 ?????? Note that two methods of citation are used here. The original book placed the dates in parentheses. This paper uses a different method that gives each research paper that is cited a sequence number. We combine both methods here to retain the original paper ' s format and use the numbering method for the current paper simultaneously.

If scientists have to refer to the work of others, where does plagiarism come to the picture? Wikipedia defines plagiarism as "the ' wrongful appropriation ' and ' are stealing and publication ' of another authors ' language, thoughts, ideas, or expressions ' and the representation of them as ones own original work." Therefore, plagiarism can be defined more simply as using someone elses writing and making it appear that you prepared material independently.

The above quotation from Hyatt4 provides a good example of the appropriate use of another scientists ' work. This author gives appropriate credit to another author for a previously published work. Defining the format used to give that credit is beyond the scope of this paper.

If Hyatt had plagiarized Smiths work, he could have simply made the above statement without giving Smith credit for having done the work. For example, he might have said:

A total of 2,469 vascular plant taxa are known to occur in the state of Arkansas. ?????? Clearly, this would have been plagiarism. Hyatt wouldve taken Smiths statement and made it appear that you personally identified 2,469 plants that grow in Arkansas, USA. Obviously, if an author wants to make a statement based on someone elses work they should create a citation of the previous authors work and list the place where that work can be found in his or her list of references.

Most journals demand that an abstract not include references and citations. To some extent, an abstract is an exception to rules related to plagiarism. An abstract only provides a brief summary of a research study; the citations of previous work are almost always only included in the body of the research paper itself. In fact, after four years of editing scientific research papers full-time, the author of this paper has yet to see an abstract with a citation. In general, most citations appear in the Introduction and the Discussion sections of a research paper, although the Results section often needs to refer to the manufacturers of equipment or the makers of software and infrequently includes other citations. Even the Conclusion section of a paper may sometimes need to cite the previous work of others.

If it is so easy to cite the work of someone else, why are journals so adamant, so certain, that they will not accept papers with plagiarism. Occasionally, an author may want to take shortcuts and use the description of a technique previously described by someone else in their own paper. If such a description is included without a citation, this would be plagiarism. In our example above, the author could have made it appear, incorrectly, that he had personally identified 2,469 species of plants from Arkansas. However, he had not done that. Smith was the author who had taken on that task.

Therefore, when preparing a research paper you should be careful to make sure that you give credit appropriately if you describe the work of someone else or present numerical data or findings of someone elses research. This also applies if you use the same techniques that someone else uses and you want to describe the techniques in detail in your paper. Two specific situations apply here. If you use a previous authors wording, then cite that author ' s research paper. In addition, if you use a previous author ' s ideas

or methods, you still need to cite their research even though you use completely different wording as is shown in our example with 2,469 species.

A second type of plagiarism is called self-plagiarism. Self-plagiarism occurs in a few different ways. The most blatant example occurs when an author submits an identical research paper to two different journals simultaneously. Journals do not want to use their time and energy to analyze your research paper and go through the process of preparing it for publication only to discover that you have submitted your work to another journal that has processed the paper faster and chosen to publish it. While technically this might not be called self-plagiarism, submitting the same paper to two different journals simultaneously is considered very inappropriate.

Sometimes, an author may make the mistake of pulling data or information, including complete sentences, from a previous publication of their own. This may not seem like a bad idea. After all, you created the paper, why cant you use your information? The answer is fairly simple. You can use the information, but you need to recognize your own work as having been previously published elsewhere. Dont make the mistake of trying to publish two slightly different papers based on the same data using the same ideas without appropriate citation. It is appropriate to publish a series of papers on the same topic. This occurs frequently, but as usual, authors need to remember to refer to previously published material with appropriate citation.

Lastly, it doesnt matter whether you were quoting a sentence, a paragraph, or an entire method section of the paper. You either need to write independently and use unique data or recognize that you are using previously published information. Today, software is readily available to publishers that will check your paper for plagiarism, including self-plagiarism.

In todays world, it is quite easy for even the careers of high-level politicians to be destroyed by plagiarism6. Preparing citations and adding a list of references is fairly easy to do. Dont let your career suffer because you neglected to give appropriate credit to the scientists who have laid the foundation for your work, including yourself.

References

2. Smith, E. B. 1988. An atlas and annotated list of the Flora of Arkansas. Published by the author.

3. Smith, E. B. 1994. Keys to the Flora of Arkansas. University of Arkansas Press. Fayetteville, Arkansas, USA.

4. Hyatt, P. E. 1998. Arkansas Carex (Cyperaceae): A briefly annotated list. Sida, Contributions to Botany 18:535 – 554.