Plagiarism and Research Ethics

Mark Walters and Franco Vivaldi

November 15, 2018
What is plagiarism?

The University of Oxford defines it as follows:

Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating it into your work without full acknowledgement.

QMUL defines it as follows:

The College defines plagiarism as presenting someone else's work as one's own, irrespective of intention. Extensive quotations; close paraphrasing; copying from the work of another person, including another student, or using the ideas of another person without proper acknowledgement, also constitute plagiarism.
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The last point is the most significant: it is your responsibility to imagine what the reader will believe from what you have written.
The internet has sent shock-waves through the world of intellectual property; first in the music industry, then in all corners of publishing, in the image and film industry, etc. The development of search engines (such as Google) and open access storage facilities (YouTube) has created among users an expectation of universal availability, even a sense of entitlement to free access. As the technology rushes ahead, the development of new legislation and business models is still in a state of flux. This is very relevant to plagiarism.
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Seriousness

Plagiarism is a disciplinary offence. You could lose all your marks on your project—even be expelled from College!

The College uses advanced software for detecting it (e.g., Turn-It-In).

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Technology

To get an idea of how the technology for detecting plagiarism works, consider the Google search:

′′ substantial literature on the subject ′′

45000 results

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Citing \underline{adds value} to your work: it shows that you have read the literature, and that you know how the results fit together.
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Citing too much is better than citing too little: if in doubt, give a citation.
Verbatim copying means using the same words as someone else, typically by 'cutting and pasting'. Verbatim copying does not equate to plagiarism; indeed quoting a famous sentence is a rather common device (albeit rather uncommon in mathematics, where we rarely 'argue by authority').

• To avoid plagiarism, there must always be a clear quote, either enclosing the relevant passage within quotation marks, or displaying it using the \texttt{quote} environment in LATEX.
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Paraphrasing

When repeating an argument given by someone else, one must paraphrase the original text. To avoid plagiarism, the following is required:

- A citation, since you are still taking the idea of the argument from someone else.
- A substantial re-writing of the source, not merely reproducing it with slight changes.

You should read the argument, then close the book/article and try to reproduce the argument in your own words.

Paraphrasing can be tricky, e.g., in a difficult proof; take advice from your supervisor in these cases.
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Examples

Our proof is essentially that given in [13]. Let $A$ be.

As in [Tuck14], we begin our proof by.

The steps in the proof of theorem 3.6 are as follows (for more details, see [12,Theorem 2]).

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\text{(for more details, see cite[Theorem 2]{Silverman:08})}
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‘Using the ideas of Bollobás’s proof of…’
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**Example**

‘Using the ideas of Bollobás’s proof of…’
‘Following Bollobás [3] …’
In some cases, there may not be a clear reference, because everyone knows it. You must still make it clear that it is not your own idea, using expressions such as 'It is well-known that...' or 'The following result is folklore.' Make sure that the lack of a reference is not a consequence of your lack of familiarity with the literature. If someone proved this result and you are not giving credit, then you are likely to annoy that person. However, you are not being dishonest; so while you could be penalised for poor practice, it would not be plagiarism.
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Research papers often begin with a vast bibliography, citing all the works that form the background and motivation of the document.

'Discrete-space versions of symplectic maps first appeared in the study of numerical orbits \cite{Rannou,Kaneko,Scovel, EarnTremaine, Vivaldi:94, NucinkisEtAl}, to mimic quantum effects in classical systems \cite{6} and to improve the efficiency of delicate computations \cite{12}.'
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**Articles**
- author names(s), title, journal's name [in italic/slanted], volume number [in boldface], year of publication, page range.
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...
\bibitem{Karney}
C. F. F. Karney,
Long time correlations in the stochastic regime,
\textit{Physica D}
\textbf{8}
(1983)
360--380.
...
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...\bibitem{Silverman}
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In a project, you are likely to be using standard material from, say, a textbook. To incorporate such material in a single citation, use expressions such that

'For background material, see [4].'

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For specific results, one may then employ targeted citations to the above sources.

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Subjects:
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