#### A CLEVER PUN: AN EXPLANATORY SUBTITLE

by

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# THE UNIVERSITY OF ARIZONA GRADUATE COLLEGE

As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Raymond Quentin Smuckles, titled A Clever Pun: An Explanatory Subtitle and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

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### STATEMENT BY AUTHOR

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# Acknowledgements

Thanks for all the fish.

## Dedication

Dedicated to some nice folks.

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# List of Figures

1.1	This is a margin figure. The helix is defined by $x = \cos(2\pi z)$ , $y = \sin(2\pi z)$ , and $z = [0, 2.7]$ .	
	The figure was drawn using Asymptote (http://asymptote.sf.net/)	10
1.2	This graph shows $y = \sin x$ from about $x = [-10, 10]$ . Notice that this figure takes up the full page	
	width	1:
1.3	Hilbert curves of various degrees $n$	1:

# List of Tables

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## Abstract

Abstracts are required.

#### 1 Introduction

THE INTRODUCTION CHAPTER begins here, starting with small caps like Tufte does, using the \newthought command (which you can also use to start a new thought within a section. This style is based on Edward Tufte's (TOUGH-tee) books.¹ There are many cheats and shortcuts to approximate Tufte's style, like using Palatino, Helvetica, and Bera Mono rather than Tufte's actual fonts like Bembo and Gill Sans. More detail about what styles to use within this class, see Tufte Latex.

#### **Floats**

EACH SECTION also starts with small caps. Okay, you probably noticed the huge margins. You don't necessarily have to use them all the time. For example, I could cite Tufte here (Tufte, 2001) by using the \citep instead of the \cite command, which makes marginal citations.

#### Subsection

By the way, there are subsections, but no sub-subsections. This is on purpose.

Paragraph The paragraph command is as small as it gets.

#### Floats again

Anyway, part of the reason to use this class is the use of sidenotes<sup>2</sup> and margin notes. Margin notes work the same but have no superscript to refer back to the text.

You can also put figures and tables in the margins using the marginfigure and margintable environments, and reference them as normal, like Fig. 1.1. A trick with these is that they sometimes run into each other, in which case you should use the optional offset like

<sup>1</sup> Tufte, E. R. (2001). *The Visual Display of Quantitative Information*. Graphics Press, Cheshire, Connecticut. ISBN 0-9613921-4-2; Tufte, E. R. (1990). *Envisioning Information*. Graphics Press, Cheshire, Connecticut. ISBN 0-9613921-1-8; Tufte, E. R. (1997). *Visual Explanations*. Graphics Press, Cheshire, Connecticut. ISBN 0-9613921-2-6; and Tufte, E. R. (2006). *Beautiful Evidence*. Graphics Press, LLC, first edition. ISBN 0-9613921-7-7

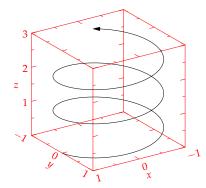
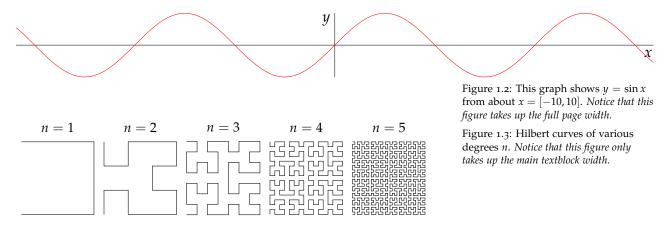


Figure 1.1: This is a margin figure. The helix is defined by  $x = \cos(2\pi z)$ ,  $y = \sin(2\pi z)$ , and z = [0, 2.7]. The figure was drawn using Asymptote (http://asymptote.sf.net/). <sup>2</sup> Like this one, introduced with sidenote or footnote.

\begin{margintable}[-5em]. Similar options exist for sidenotes and margin notes, so checkout Tufte LaTeX for more info. Sidenotes are also great for short code listings.<sup>3</sup>

Anyway, of course not everything can go in the margin, and for that we have the figure and figure\* environment, for normal text width and full page width, respectively.

 $glm(y \sim m * x + b, family = "binomial")$ 



#### *By the way*

Please use booktabs-style tables, please. Please. They look like Table 1.1.

Name	Species	Age	Smell
Phillipe	Otter	5	musky
Téodor	Bear	~35	bachelor-esque
Molly	Cat	>100	fresh laundry
Liebot	Robot	???	Drakkar Noir

Table 1.1: The way that tables should look.

The zebra-striping (achieved using \rowcolor) and title italics are optional, but the point is not to have a thousand thick black lines obscuring the information. Analogous to figures, variants margintable, table, and table\* exist. Please just don't use them to make tables like 1.2.

#### Speaking of which

If you want it all to go together nicely, I suggest making figures in R. My favorite practical guide to making Tufte-like graphs is Tufte in R by Lukasz Piwek.

Alg	P	AUC
BF-1000	0.67**	0.81**
MTG-MN	0.54	0.32
RM-DL2	0.33	0.48
3CPO	0.45	0.22

Table 1.2: A distractingly ugly and overwrought margin table with obscure abbreviations.

# A An Example of an Appendix

You may choose to use the fullwidth environment to get rid of the margin if your appendix is just a list of words or something, e.g.:

 $\verb|\begin{fullwidth|}|$ 

Hello

\end{fullwidth}

## References

Tufte, E. R. (1990). Envisioning Information. Graphics Press, Cheshire, Connecticut. ISBN 0-9613921-1-8.

Tufte, E. R. (1997). Visual Explanations. Graphics Press, Cheshire, Connecticut. ISBN 0-9613921-2-6.

Tufte, E. R. (2001). *The Visual Display of Quantitative Information*. Graphics Press, Cheshire, Connecticut. ISBN 0-9613921-4-2.

Tufte, E. R. (2006). Beautiful Evidence. Graphics Press, LLC, first edition. ISBN 0-9613921-7-7.