

QUANTITATIVE ANALYSIS IN ARCHAEOLOGY

Todd L. VanPool & Robert D. Leonard



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 **WILEY-BLACKWELL**
A John Wiley & Sons, Ltd., Publication

This edition first published 2011

© 2011 Todd L. VanPool and Robert D. Leonard

Blackwell Publishing was acquired by John Wiley & Sons in February 2007. Blackwell's publishing program has been merged with Wiley's global Scientific, Technical, and Medical business to form Wiley-Blackwell.

Registered Office

John Wiley & Sons Ltd, The Atrium, Southern Gate,
Chichester, West Sussex, PO19 8SQ, United Kingdom

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350 Main Street, Malden, MA 02148-5020, USA

9600 Garsington Road, Oxford, OX4 2DQ, UK

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8SQ, UK

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Library of Congress Cataloging-in-Publication Data

VanPool, Todd L., 1968-

Quantitative analysis in archaeology Todd L. VanPool,
Robert D. Leonard.

p. cm.

ISBN 978-1-4051-8951-4 (hardback : alk. paper) – ISBN
978-1-4051-8950-7 (pbk. : alk. paper) – ISBN 978-1-4443-
9017-9 (ebk)

1. Archaeology–Methodology. 2. Quantitative
research. 3. Archaeology–Research. I. Leonard, Robert
D. II. Title.

CC75.7.V36 2010

930.1072-dc22

2010030199

A catalogue record for this book is available from the British
Library.

To Connie Wuebke and Glenn McCoy, two teachers who taught TVP what counts

To Grandmas Maggie and Ferne, for helping RDL learn his numbers

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Acknowledgments

First and foremost, we express our gratitude to the many students who have contributed to this volume through their participation in our Quantitative Methods in Anthropology classes. Our interaction with them has been the inspiration for both the structure and contents of this book. Robert R. Sokal's and F. James Rohlf's excellent text *Biometry*, has, no doubt, influenced this volume, given that we have taught from it for years. We also gratefully acknowledge the helpful comments of Drs. R. Lee Lyman and Gordon F.M. Rakita, as well as two anonymous reviewers. They read drafts of this volume and helped strengthen it tremendously. We thank Drs. Christine S. VanPool and Marcus Hamilton for their useful comments and suggestions through the years. Finally, Robert Leonard thanks Drs. Donald Grayson and Loveday Conquest, and Todd VanPool thanks Dr. Stephen R. Durand for introducing us to quantitative methods. Thank you all so very much!

1

Quantifying Archaeology

If archaeologists do anything, it is count. We count stones, bones, potsherds, seeds, buildings, settlements, and even particles of earth - virtually everything that constitutes the archaeological record. We also measure essentially everything that we touch. Length, weight, thickness, depth, volume, area, color, and height are only some of the simplest measurements taken. We are exaggerating only slightly when we state that our predilection for counting and measuring ensures fame (if not fortune) to anyone who brings to our attention some forgotten or never known aspect of the archaeological record that archaeologists should be counting and/or measuring.

Most archaeologists are in the counting and measuring business not for its own sake, but to help us fashion a meaningful perspective on the past. Quantification isn't required to back up every proposition that is made about the archaeological record, but for some propositions it is absolutely essential. For example, suppose we proposed an idea about differences in Hallstatt assemblages in Central Europe that could be evaluated by examining ceramic variation. Having observed hundreds of the pots, we could merely assert what we felt the major differences and similarities to be, and draw our conclusions about the validity of our original idea based upon our simple observations. We might be correct, but no one would take our conclusions seriously unless we actually took the relevant measurements and demonstrated that the differences and/or similarities were meaningful in a way that