

Henry C. Harpending

Address

Department of Anthropology
University of Utah
Salt Lake City, UT 84112, USA

Phone (801) 581-3776
Fax (801) 581-6252
Internet henry.harpending@anthro.utah.edu

Personal Information

Born 13 January 1944 in Dundee, New York
Home phone (801) 582-7760

Education

B.A., 1964, Anthropology, Hamilton College.
M.A., 1965, Anthropology, Harvard University.
Ph.D., 1972, Anthropology, Harvard University.

Areas of Specialization

Foragers, pastoralists, Africa, demography, population genetics, evolutionary ecology,
human evolution.

Employment

Instructor in Social Relations, Harvard University, 1971 spring,
Assistant Professor of Anthropology, Yale University, 1972-1973,
Assistant Professor to Professor of Anthropology, University of New Mexico, 1973-1985,
Professor of Anthropology and Human Development, Pennsylvania State University,
1985-1997,
Thomas Professor of Anthropology, University of Utah, 1997-present.

Professional Activities and Awards

Associate Editor, *American Journal of Physical Anthropology*, 1976–78.
Chair, University of New Mexico Human Subjects Research Review Board for Arts and Sciences, Management, and Engineering, 1981–85.
Associate Editor, *Human Biology*, 1985–88.
Associate Editor, *American Journal of Human Biology*, 1988–93.
Associate Editor, *Human Biology*, 1991–present.
Associate Editor, *American Journal of Physical Anthropology*, 1993–1998.
Faculty Scholar Medal, Pennsylvania State University, 1994.
Member, King's College (Cambridge) initiative on modern human origins, 1995–.
National Academy of Sciences, 1996–.
Editorial Board, *Population and Environment*, 1998–.
NAS Section 51 Liaison to NRC, 1998–.
Editorial Board, *Proceedings of the National Academy of Sciences USA*, 2000–
Fellow, American Association for the Advancement of Science, 2000–

Fieldwork

Eighteen months in Botswana, 1967–68
Six months in Botswana, 1975
Fourteen months in Botswana and Namibia, 1987–88
Two months in Botswana, 1990
Three months in Botswana, 1992

Languages

French, reading
!Kung Bushman, speaking, fluent
Otjiherero, speaking, minimal

Publications

Books

Pennington, R. and H. Harpending. 1993. *The Structure of an African Pastoralist Community: Demography, History and Ecology of the Ngamiland Herero*. Oxford: Oxford University Press.

Keith, J., C.L. Fry, A.P. Glascock, C. Ikels, J. Dickerson Putnam, H.C. Harpending, and P. Draper. 1994. *The Aging Experience*, Sage publications.

Articles and Book Chapters

- Damon, A., S.T. Damon, and H.C. Harpending. 1969. Predicting coronary heart disease from body measurements of Framingham males. *Journal of Chronic Disease* 21:781–802.
- Metz, J., D. Hart, and H.C. Harpending. 1971. Iron, folate, and vitamin B12 nutrition in a hunter-gatherer people: a study of the !Kung Bushmen. *American Journal of Clinical Nutrition* 24:229–242.
- Jenkins, T., H.C. Harpending, *et al.* 1971. Red cell enzyme polymorphisms in the Khoisan peoples of southern Africa. *American Journal of Human Genetics* 23:513–532.
- Harpending, H.C. 1971. Inference in population structure studies. *American Journal of Human Genetics* 23:536–540.
- Yellen, J. and H.C. Harpending. 1972. Hunter-gatherer populations and archaeological inference. *World Archaeology* 4:244–253.
- Harpending, H.C. and T. Jenkins. 1973. Genetic distance among southern African populations, in *Method and Theory in Anthropological Genetics*, edited by M. Crawford and P. Workman, Albuquerque: University of New Mexico Press.
- Workman, P., H.C. Harpending, *et al.* 1973. Papago population structure: a comparison of genetic and migration analysis, in *Genetic Structure of Populations*, edited by N. Morton. Honolulu: University of Hawaii Press.
- Harpending, H.C., P. Workman, and J. Grove. 1974. Local genotypic disequilibrium in a generalized island model. *Human Biology* 45:359–362.
- Harpending, H.C. 1974. Genetic structure of small populations. *Annual Review of Anthropology* 3:229–243.
- Harpending, H.C. and T. Jenkins. 1975. !Kung population structure, in *Genetic Distance*, edited by J.F. Crow and C. Denniston, New York: Plenum Press.
- Harpending, H.C. and W. Chasko. 1975. Heterozygosity and population structure in southern Africa, pp.214–228 in *Measures of Man*, edited by E. Giles and J. Friedlander, Cambridge: Peabody Museum Press.
- Harpending, H.C. and J.B. Bertram. 1975. Human population dynamics in archaeological time: some simple models. *Memoirs of the Society for American Archaeology* 40:82–91.

- Steinberg, A.G., T. Jenkins, G.T. Nurse, and H.C. Harpending. 1975. Gammaglobulin groups of the Khoisan peoples of Southern Africa: evidence for polymorphism for a Gm^{1,5,13,14,21} haplogene among the San. *American Journal of Human Genetics* 27:528–542.
- Jorde, L.B. and H.C. Harpending. 1975. Cross-spectral analysis of rainfall and human birth rate: an empirical test of a linear model. *Journal of Human Evolution* 5:129–138. Reprinted in *Demographic Evolution of Human Populations*, edited by R.H. Ward and K.M. Weiss, New York: Academic Press.
- Harpending, H.C. 1976. Genetic and demographic variation in Zu/wasi populations, pp.152–165 in *Studies of Kalahari Hunter-Gatherers*, edited by R. Lee and I. DeVore, Cambridge: Harvard University Press.
- Harpending, H.C. and H. Davis. 1977. The spatial structure of resources: some implications for hunter-gatherer ecology. *World Archaeology* 8:275–286.
- Jenkins, T., H.C. Harpending, and G.T. Nurse. 1978. Genetic distances among certain South African populations, pp.227–243 in *Evolutionary Models and Studies in Human Diversity*, edited by Robert Meier, Chicago: Aldine.
- Nurse, G.T., H.C. Harpending, and T. Jenkins. 1978. Biology and history of South African populations, pp. 245–254 in *Evolutionary Models and Studies in Human Diversity*, edited by Robert Meier, Chicago: Aldine.
- Harpending, H.C. 1979. The population genetics of interactions. *American Naturalist* 113:622–630.
- Chasko, W.J., G.T. Nurse, H.C. Harpending, and T. Jenkins. 1979. Sero-genetic Studies on the ‘Masarwa’ of Northeastern Botswana. *Botswana Notes and Records* 11:15–23.
- Harpending, H.C. 1980. Perspectives on the theory of social evolution, pp.45–64 in *Current Developments in Anthropological Genetics* Volume 1, edited by M.H. Crawford and J.H. Mielke, New York: Plenum Press.
- Draper, P. and H.C. Harpending. 1982. Father absence and reproductive strategy: an evolutionary perspective. *Journal of Anthropological Research* 38:255–273.
- Harpending, H.C. and L. Wandsnider. 1982. Population structure of Ghanzi and Ngamiland !Kung, pp. 29–50 in *Current Developments in Anthropological Genetics*, Volume 2, edited by M.H. Crawford and J.H. Mielke, New York: Plenum Press.

- Harpending, H.C. and R. Ward. 1982. Chemical systematics and human populations, pp. 213–256 in *Biochemical Aspects of Evolutionary Biology*, edited by M. Nitecki, Chicago: University of Chicago Press.
- Sattenspiel, L. and H.C. Harpending. 1983. Stable populations and skeletal age. *American Antiquity* 48:489–498.
- Rogers, A.R. and H.C. Harpending. 1983. Population structure and quantitative characters, *Genetics* 105:985–1002.
- Harpending, H.C. and P. Draper. 1984. Selection Against Human Family Organization. in *On Evolutionary Anthropology*, edited by B.J. Williams, Malibu:Undena Press.
- Draper, P. and H.C. Harpending. 1986. Parent Investment and the Child's Environment, in *Biosocial Perspectives on Parenting Across the Life Cycle*, edited by J. Lancaster, J. Altmann, and A. Rossi, New York: Aldine.
- Harpending, H.C. 1986. Word Salad. *Reviews in Anthropology*, Spring, 135–140.
- Harpending, H.C. and S. Cowan. 1986. Primate Population Structure: Evaluation of Field Data. *American Journal of Physical Anthropology* 70:63–68.
- Rogers, A.R. and H.C. Harpending. 1986. Migration and genetic drift in human populations, *Evolution* 40:1312–1327.
- Harpending, H. and J. Sobus. 1986. Sociopathy as an Adaptation. *Ethology and Sociobiology* 8:63–72.
- Harpending, H.C., A. Rogers, and P. Draper. 1987. Human Sociobiology. *Yearbook of Physical Anthropology* 30:127–150.
- Harpending, H.C. and A.R. Rogers. 1987. On Wright's mechanism for intergroup selection. *Journal of Theoretical Biology* 127:51–61.
- Harpending, H.C. 1987. [Untitled], invited commentary on a paper by Howell and Hammel, *Current Anthropology* 28:158.
- Harpending, H.C., A.R. Rogers, and P. Draper. 1987. Human sociobiology. *Yearbook of Physical Anthropology* 30:137–150.
- Harpending, H.C. and P. Draper. 1988. Antisocial Behavior and the Other Side of Cultural Evolution, pp. 293–307 in *Biological Contributions to Crime Causation*, edited by T.E.

- Moffitt and S.A. Mednick, Dordrecht: Martinus Nijhoff.
- Draper, P. and H.C. Harpending. 1988. A Sociobiological Perspective on the Development of Human Reproductive Strategies, pp. 340–372 in *Sociobiological Perspectives on Human Development*, edited by K. MacDonald, New York: Springer Verlag.
- Pennington, R. and H.C. Harpending. 1988. Fitness and Fertility among Kalahari !Kung. *American Journal of Physical Anthropology* 77:303–319.
- Milner, G., D. Humpf, and H. Harpending. 1989. Pattern Matching of Age-at-Death Distributions in Paleodemographic Reconstruction. *American Journal of Physical Anthropology* 80:49–58.
- Vigilant, L., R. Pennington, H. Harpending, T. Kocher, and A. Wilson. 1989. Mitochondrial DNA sequences in single hairs from a southern African population. *Proceedings of the National Academy of Sciences of the USA* 86:9350–9354.
- Harpending, H.C. and P. Draper. 1989. [untitled] invited commentary on an article by Solway and Lee, *Current Anthropology* 31:127–129.
- Harpending, H. and P. Draper. 1990. Estimating Parity of Parents: An Application to the History of !Kung Fertility. *Human Biology* 62:195–203.
- Harpending, H.C., P. Draper, and R. Pennington. 1990. Cultural Evolution, Parental Care, and Mortality, in *Health and Disease in Transitional Societies*, edited by G. Armelagos and A. Swedlund, South Hadley, Mass.: Bergin and Garvey.
- Harpending, H.C. and R. Pennington. 1990. Herero households. *Human Ecology* 18:417–439.
- Harpending, H.C. and A.R. Rogers. 1990. Fitness in stratified societies. *Ethology and Sociobiology* 11:497–509.
- Harpending, H.C. and R. Pennington. 1991. Age structure and sex-biased mortality among Herero pastoralists. *Human Biology* 63:327–352.
- Pennington, R. and H.C. Harpending. 1991. Infertility in Herero Pastoralists of Southern Africa. *American Journal of Human Biology* 3:135–153.
- Pennington, R. and H.C. Harpending. 1991. The effect of infertility on the population structure of the Herero and Mbanderu of Ngamiland. *Social Biology* 38:127–139.

- Harpending, H.C. 1991. Age differences between mates in southern African Pastoralists. *Behavioral and Brain Sciences* 15:102–103.
- Pennington, R. and H.C. Harpending. 1991. How many refugees were there? History and population change among the Herero and Mbanderu of northwestern Botswana. *Botswana Notes and Records* 23:209–221.
- Vigilant, L., M. Stoneking, H. Harpending, K. Hawkes, and A. Wilson. 1991. African populations and the evolution of human mitochondrial DNA. *Science* 253:1503–1507.
- Harpending, H.C. and R. Pennington. 1992. Demography and Herero History, in *Genetics, Demography, and Health of Minority Populations*, edited by D. F. Roberts and A. Bittles, London: Macmillan.
- Wood, J. W., G.R. Milner, H.C. Harpending, and K.M. Weiss. 1992. The osteological paradox: problems of inferring prehistoric health from skeletal samples. *Current Anthropology* 33:343–370.
- Ikels, C., J. Keith, J. Dickerson-Putnam, P. Draper, C. Fry, A. Glascock, and H. Harpending. 1992. Perceptions of the adult life course: a cross-cultural analysis. *Ageing and Society* 12:49–84.
- Rogers, A.R. and H.C. Harpending. 1992. Population growth makes waves in the distribution of pairwise genetic differences. *Molecular Biology and Evolution* 9:552–569.
- Harpending, H.C. 1993. [untitled] commentary on an article by Kristen Hawkes. *Current Anthropology* 34:353.
- Harpending, H.C. 1993. Herero of Botswana, in *State of the Peoples*, Cultural Survival, Boston, Beacon Press.
- Harpending, H.C., S.T. Sherry, A.R. Rogers and M. Stoneking. 1993. Structure of ancient human populations. *Current Anthropology* 34:483–496. [Discussed in *Science* 262:27–28, 265:1661, 267:35–36.]
- Harpending, H.C. 1994. Infertility and Forager Demography. *American Journal of Physical Anthropology* 93:385–390.
- Sherry, S., A.R. Rogers, H.C. Harpending, H. Soodyall, T. Jenkins and M. Stoneking. 1994. Pairwise differences of mtDNA reveal recent human population expansions. *Human Biology* 66:761–776.

- Harpending, H.C. 1994. Signature of ancient population growth in a low resolution mitochondrial DNA mismatch distribution. *Human Biology* 66:591–600.
- Harpending, H.C. 1994. Gene frequencies, DNA sequences, and human origins. *Perspectives in Biology and Medicine* 37:384-394.
- Draper, P. and H.C. Harpending. 1994. Cultural considerations in the experience of aging: two African cultures, in *Functional Performance in Older Adults*, edited by B. Bonder and M. Wagner, F.A. Davis: Philadelphia.
- Relethford, J. and H.C. Harpending. 1994. Craniometric Variation, Genetic Theory, and Modern Human Origins. *American Journal of Physical Anthropology* 95:249–270.
- Relethford, J. and H.C. Harpending. 1995. Ancient differences in population size can mimic an African origin of modern humans. *Current Anthropology* 36:667–674.
- Harpending, H.C. and J. Relthford. 1996. Methods and Models for Understanding Human Diversity. pp. 283–299 in *Molecular Biology and Human Diversity*, edited by A. Boyce and N. Mascie-Taylor, Cambridge University Press.
- Harpending, H.C. and J. Relethford. 1997. Population Perspectives on Human Origins Research. Pp. 361–368 in *Conceptual Issues in Human Origins Research*, edited by G. Clark and K. Willamette, Chicago, Aldine.
- Harpending, H.C. 1997. Théorie de l'évolution et démographie: une histoire malheureuse. Pp 119-128 in *Conception, Naissance, et Petite Enfance au Maghreb*, edited by E. Crognier, CNRS-Universités d'Aix-Marseille.
- Fry, C.L., J. Dickerson-Putman, J. Keith, C. Ikels, A.P. Glascock, H.C. Harpending, and P. Draper. in press. Culture and the meaning of a good old age. in *The Cultural Context of Aging: Worldwide Perspectives*, edited by J. Sokolovsky.
- Harpending, H.C. in press. Living Records of Past Population Change. in *Integrating Archaeological Demography: Multidisciplinary Approaches to Prehistoric Population*, edited by Richard Paine, Carbondale: Southern Illinois University Press.
- Paine, R.R. and H.C. Harpending. 1996. The Reliability of Paleodemographic Fertility Estimators. *American Journal of Physical Anthropology* 101:151–160.
- Eller, E. and H.C. Harpending. 1996. Simulations show that neither population nor population stationarity in a West African population can be rejected. *Molecular Biology and Evolution* 13:1155–1157.

- Harpending, H.C. 1996. Genetic evidence about the origins of modern humans. pp. 127–132 in *Colloquia of XIII International Congress of Prehistoric and Protohistoric Sciences*, vol 5, Forli, Italy.
- Sherry, S.T., H.C. Harpending, M.A. Batzer, and M. Stoneking. 1997. Alu evolution in human populations: using the coalescent to estimate effective population size. *Genetics* 147: 1977-1982.
- Jorde, L.B., A.R. Rogers, M. Bamshad, W.S. Watkins, P. Krakowiak, S. Sung, J. Kere, and H.C. Harpending. 1997. Microsatellite diversity and the demographic history of modern humans. *PNAS* 94:3100–3103.
- Harpending, H.C., M.A. Batzer, M. Gurven, L.B. Jorde and A.R. Rogers. 1998. Genetic traces of ancient demography. *PNAS* 95:1961–1967.
- Harpending, H.C. 1998 Untitled commentary on an article by David S. Wilson. *Current Anthropology* 39:.
- Sherry, S.T., M.A. Batzer, and H.C. Harpending. 1998. Modeling the genetic architecture of modern populations. *Annual Review of Anthropology* 27:153–169.
- Harpending, H.C. and E. Eller. 1999. Human diversity and its history. in *Human Diversity and its History*, ed. M. Kato, chapter 20 pp. 301–314. Springer-Verlag, Tokyo.
- Harpending, H.C. and A. Rogers. 2001. Genetic perspectives on human origins and differentiation. *Annual Review of Genomics and Human Genetics*. 1:361–385.
- Patterns of Ancestral Human Diversity: An Analysis of Alu-Insertion and Restriction-Site Polymorphisms W. S. Watkins, C. E. Ricker, M. J. Bamshad, M. L. Carroll, S. V. Nguyen, M. A. Batzer, H. C. Harpending, A. R. Rogers, and L. B. Jorde *American Journal of Human Genetics* Am. J. Hum. Genet., 68:738-752, 2001
- Harpending, H.C. and E. Eller. 2000. Genetic Perspectives on the Origins of Human Diversity. *Rivista di Anthropologia* 78:67–74.
- Ding, Yuan-Chun, Stephen Wooding, Henry C. Harpending, Han-Chang Chi, Hai-Peng Li, Yun-Xin Fu, Jun-Feng Pang, Yong-Gang Yao, Jing-Gong Xiang Yu, Robert Moyzis, and Ya-ping Zhang. 2000. Population structure and history in east Asia. *PNAS* 97:14003–14006.
- Harpending, H.C. 2001. Solicited commentary on an article by Lieberman. *Current Anthropology* 42:82.

- Harpending, H.C. and G. Cochran. 2002. In our genes. *PNAS* 99:10–12.
- Harpending, H.C. in press. Human genealogical history, in *Oxford Encyclopedia of Evolution*.
- Harpending, H.C. in press. Race: Population Genetics Perspectives, *Oxford Encyclopedia of Evolution*.
- Harpending H.C. and G. Cochran, in press. Selection, in *Oxford Encyclopedia of Evolution*.
- Harpending, H.C. in press. The origin of modern humans: interpreting the molecular evidence. *Macmillan Encyclopedia of The Life Sciences*.
- Harpending, H.C. in press. Archaeogenetics. *Macmillan Encyclopedia of Population*.
- Harpending, H.C. in press. Humans: demographic history of. *Macmillan Encyclopedia of the Human Genome*.
- Bulayeva, K., L. Jorde, S. Watkins, and H. Harpending. Submitted. Genetics and Population History of Caucasus Populations. *Human Biology*.
- Harpending, H.C. 2002. Kinship and population subdivision. *Population and Environment* 24:141–147.
- Harpending, H.C. 2002. Untitled commentary on a paper by Vinayak Eswaran, *Current Anthropology* 43:765–766.

Reviews

- Harpending, H.C. 1972. Review of *Explorations in Mathematical Anthropology*, edited by P. Kay, *American Journal of Physical Anthropology* 36:445–446.
- Harpending, H.C. 1972. Review of *The Genetics of Human Populations*, by L.L. Cavalli-Sforza and W. Bodmer, *American Anthropologist* 74:1531–1532.
- Harpending, H.C. 1973. Review of *The Structure of Human Populations*, edited by G. Harrison and A. Boyce, *American Scientist* 61:756.
- Harpending, H.C. 1975. Review of *Form and Pattern in Human Evolution*, by C. Oxnard, *American Scientist* 63:350.
- Harpending, H.C. 1976. Review of *The Peoples of Africa*, by J. Hiernaux, *Science*

191:461–462.

Harpending, H.C. 1976. Review of *Demographic Anthropology*, edited by E. Zubrow, *Journal of Anthropological Research* 32:203.

Harpending, H.C. 1977. Review of *Mathematics and Computers in Archaeology*, by J.E. Doran and F.R. Hodson, *Journal of Anthropological Research* 33:352–353.

Harpending, H.C. 1978. Review of *The Tlaxcaltecs*, edited by M. Crawford, *American Scientist* 66:99.

Harpending, H.C. 1978. Review of *People Pollution*, by Freeman and *Population and its Problems*, edited by Parry, *American Anthropologist* 80:414–415.

Harpending, H.C. 1978. Review of *Population Structure and Human Variation*, edited by G.A. Harrison, *American Scientist* 66:632–633.

Harpending, H.C. 1978. Review of *Demography of the Semai Senoi*, by Alan Fix, *Human Biology* 50:561–562.

Harpending, H.C. 1982. Review of *Genes, Mind, and Culture*, by C. Lumsden and E.O. Wilson, *Animal Behavior* 30:310–311.

Harpending, H.C. 1982. Review of *On Becoming Human*, by Nancy Tanner, and *Lucy*, by D. Johansson and M. Eddy, *Human Ecology*.

Harpending, H.C. 1985. Review of *The Black Caribs*, edited by M. Crawford, *American Scientist*.

Harpending, H.C. 1985. Review of *Culture and the Evolutionary Process*, by R. Boyd and P. Richerson, *Science* 230:931.

Harpending, H.C. (1986) Review of *Peoples of Southern Africa and Their Affinities*, by G.T. Nurse, J.S. Weiner, and T. Jenkins, *Science*, 234:1133–1134.

Harpending, H.C. (1987) Review of *Despotism and Differential Reproduction*, by L. Betzig, *American Scientist* 75:87.

Harpending, H.C. 1988. Faulting Ambition: A Double Standard? *Behavioral and Brain Sciences* 10:76.

Harpending, H.C. 1990. Review of *Biological Aspects of Human Migration*, edited by

- C.G.N. Mascie-Taylor and G.W. Lasker, *American Scientist* 78:178.
- Harpending, H.C. 1990. Review of *Genes in Populations* by E. Speiss, *American Journal of Human Biology*.
- Harpending, H.C. 1990. Review of *Health and the Rise of Civilization* by Mark Cohen, *American Ethnologist* 17:799–800.
- Harpending, H.C. 1991. Review of *A Land filled with Flies*, by E. Wilmsen, *Anthropos* 86:313.
- Harpending, H.C. 1993. Review of *Evolutionary Ecology and Human Behavior* by B. Winterhalder and E.A. Smith, *Science* 260:1176–1178.
- Harpending, H.C. in press. Review of *The Runaway Brain* by C. Wills, *Quarterly Review of Biology*.
- Harpending, H.C. Human biological diversity. 1995. (Review of *The Evolution of Racism* by P. Shipman, *Race, Evolution and Behavior* by P. Rushton, *The Bell Curve* by C. Murray and R. Herrnstein, and *Human Biodiversity* by J. Marks). *Evolutionary Anthropology* 4:99–102.
- Harpending, H.C. in press. Review of *Human Diversity* by Richard Lewontin. *Quarterly Review of Biology* 71:604–605.
- Harpending, H.C. 1997. Review of *Dysgenics: Genetic Deterioration in Modern Populations*, by Richard Lynn. *Quarterly Review of Biology* 72:502-503.
- Harpending, H.C. 2001. Review of *Migration and Colonization in Human Microevolution*, by Alan Fix. *Quarterly Review of Biology* 76:123–124.
- Harpending, H.C. 2001. Review of *Archaeogenetics: DNA and Population Prehistory of Europe*, ed. by C. Renfrew and K. Boyle. *AJPA* 116:177–179.
- Harpending, H.C. 2002 in press. Review of *What it Means to be 99% Chimpanzee*, by Jonathan Marks. *American Journal of Physical Anthropology*.

Other Publications

- Pennington, R. and H.C. Harpending. 1989. *Mbanderu and Herero Project: Preliminary Report*. Department of Anthropology, Pennsylvania State University. (also available in otjiherero as *Ondungiro jo Umbanderu no Uherero: Omahandjauriro Omatenga*),

submitted to government officials, local agencies, and families in Botswana.

Pennington, R. and H.C. Harpending. 1991. Life history and unmarried mothers: the Herero of Botswana. Working paper 91-30, Center for Demography and Ecology, University of Wisconsin.

Harpending, H.C. and R. Pennington. 1991. Herero Mortality after Early Childhood. Working paper 1991-20. Population Issues Research Center, Penn State University.