



UvA-DARE (Digital Academic Repository)

Technologies of similarities and differences : on the interdependence of nature and technology in the Human Genome Diversity Project

M'charek, A.A.

[Link to publication](#)

Citation for published version (APA):

M'charek, A. A. (2000). *Technologies of similarities and differences : on the interdependence of nature and technology in the Human Genome Diversity Project.*

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

Contents

| | |
|-----------------------|----------|
| Words of Thank | v |
|-----------------------|----------|

CHAPTER 1

| | |
|------------------------------------|----------|
| By Way of Introduction | 1 |
| The Researcher in the Field: | 1 |
| The Stakes and the Argument: | 1 |
| The Diversity Project: | 4 |
| Making a Genetic Map of the World: | 7 |
| Making a Book: | 11 |
| Notes to Chapter 1 | 18 |

CHAPTER 2

Technologies of Population:

Making Differences and Similarities between Turkish and Dutch

| | |
|---|-----------|
| Males | 29 |
| Introducing the Argument | 29 |
| In Court | 30 |
| DNA Evidence and its Laboratories | 30 |
| Off to the Forensic Laboratory | 31 |
| The Lab | 33 |
| The T-Case, DNA Profile Typing | 35 |
| Back in Court | 37 |
| Expert and Counter Expert | 39 |
| Matching Likelihood Numbers and DNA Fingerprints: Immutable Mobile? | 40 |
| Similarities Presupposed | 42 |
| Proposing Differences | 44 |
| Back to the Lab | 45 |
| Back in Court | 45 |
| Tools of Similarities, Tools of Differences: Genetic markers in DNA fingerprinting | 46 |
| Arguing for Similarities | 48 |
| Arguing for Differences | 49 |
| Matching Likelihood Numbers and DNA Fingerprints: Immutable Mobiles | 50 |
| Back to the Lab: Making Similarities | 52 |

| | |
|--------------------------------|----|
| Similarities Established | 53 |
| Reporting on Immutable Mobiles | 54 |
| To conclude | 56 |
| Notes to Chapter 2 | 58 |

CHAPTER 3

| | |
|--|-----------|
| Ten Chimps in a Laboratory: Or How a Human Genetic Marker May Become a Good Genetic Marker for Typing Chimps. | 69 |
| Introducing the Argument | 69 |
| Markers: A Round-table Discussion | 70 |
| Markers: A Definition | 71 |
| Not the DNA but a Marker | 71 |
| Monitoring and Markers | 72 |
| Markers: Laboratory Practice | 72 |
| The Second Day in the Lab | 73 |
| Monitoring Markers | 75 |
| Ten Chimps in the Laboratory | 76 |
| Y-chromosomal Markers | 77 |
| Typing Ten Chimps: How Far Can Y-Markers Go? | 79 |
| Monitoring Y-chromosomal Markers in Chimps | 80 |
| Typing Ten Chimps: Are Y-chromosomal Markers Good Genetic Markers? | 80 |
| Monitoring Variation in Chimps | 82 |
| Bringing in Other Markers | 84 |
| Monitoring: Good Genetic Markers | 86 |
| A Roundtable Discussion | 87 |
| To Conclude | 90 |
| Notes to Chapter 3 | 91 |

CHAPTER 4

| | |
|---|------------|
| Naturalisation of a Reference Sequence: Anderson or the Mitochondrial Eve of Modern Genetics | 103 |
| Introducing the Argument | 103 |
| Neanderthal: The Sequence | 104 |
| The First Sequence: | 105 |
| Not in the Nucleus: Mitochondrial DNA (mtDNA) | 106 |
| The molecule in the P Lab | 107 |
| A Population-group meeting: Who is Anderson? | 108 |
| Anderson: The Reference | 108 |
| Anderson: Differences and Similarities | 110 |
| Anderson in the P Lab: | 111 |

| | |
|---|-----|
| Anderson: The British Sequence | 113 |
| Anderson: The Sequencing | 114 |
| Race: Homing In Nature | 116 |
| Anderson: The Tissue | 117 |
| Sex: Practicalities of Homing In | 118 |
| Locating Helen Lane | 120 |
| The Ir/relevance of Race: or Technologies of Naturalisation | 121 |
| Whose Mitochondrial DNA? | 122 |
| The Practice of Theory: | 123 |
| Anderson: Whose Mitochondrial DNA? | 125 |
| Anderson Made Natural: | 126 |
| To Conclude | 127 |
| Appendix: | 128 |
| Notes to Chapter 4 | 130 |

CHAPTER 5

The Traffic in Males

and Other Stories on the Enactment of the Sexes in Studies of Genetic Lineage

| | |
|--|------------|
| | 143 |
| Introducing the Argument | 143 |
| How 153 male samples lost their sex | 143 |
| On the Relevance and Irrelevance of the Sexes | 144 |
| The Traffic in Males and other Gifts in Genetics | 146 |
| Making Lineages in Genetics: An Economy of Exchange | 148 |
| Archaeology of the Human Genome or How to do Genetic Lineage | 150 |
| Genealogy, Genetic Lineages and Technologies of the Sexes | 151 |
| The Ir/relevance of Sex in Laboratory Practice | 154 |
| Technologies of DNA/Technologies of Sex | 156 |
| The Relevance of the Sexes: Sexing the Gift | 160 |
| Changing Practices, Making Sexes | 160 |
| Genealogy: Technologies of Lineage/Technology of DNA | 162 |
| Doing Genealogy: Making Sexes | 163 |
| To Conclude | 165 |
| Notes to Chapter 5 | 167 |

CHAPTER 6

| | |
|--|------------|
| Technologies of Similarities and Difference, Or How to Do Politics With DNA | 181 |
| Naturalisation: Tracing the Politics of Nature and Technology | 181 |
| Standardisation: Tracing the Normativity of Practices | 186 |
| Diversity: The Nice Thing About DNA Is That Everybody Has It | 192 |
| Talking Forwards to Politics: | 197 |
| Notes to Chapter 6 | 199 |

| | |
|-------------------------|------------|
| CITED LITERATURE | 205 |
|-------------------------|------------|

DUTCH SUMMARY/SAMENVATTING:

| | |
|--|------------|
| Technieken van gelijkheid en verschil: Over het samengaan van natuur en technologie in het Human Genome Diversity Project | 220 |
|--|------------|

