abortion
  disabilities, negative attitudes to, 112
  limitations to see legislation
  objections to, 1
  sex selection, 21
advanced maternal age, prenatal genetic
testing, 12
African Americans, 78
allocation of limited resources, 80
amniocentesis, 13
aneuploidy testing, 16
anticipatory socialization, genetic preselection,
101
arbitrary distinctions, expressivist critique, 124
Asian countries, gender imbalance, 29
autonomous morality, genetic preselection,
102, 106
autonomy
  child autonomy, genetic relatedness, 136
  cloning, objections to, 42
  family relationships see family
  relationships
  genetic imperatives, 104
  genetic modification concerns, 103
  performance capacity, 108
  Procreative Beneficence see Procreative
  Beneficence
  self agency measures, 104
‘best life’ impossibility, 57
‘best opportunity of best life’ obligation, 69,
70–74
consistency, 71–72
  educational choices, 72
  environmental advantages, 71
  mate selection, 71
  society obligations, 72
  parental culpability for harm, 72–73
  disease treatment, 72
judgement challenges, 73
  risk vs. benefit, 73
beta thalassaemia, 14
biological reductionism, 143
biopsychological correction see disability
birth order preference, 142
Brave New World (Huxley), 92
breast size augmentation, 64
capabilities, 56–57
definition, 56
carrier status
  avoidance of see cloning to avoid genetic
disease
  psychological effects of knowledge, 41
carrier testing
  cascade testing, 10
  cystic fibrosis, 40
gene testing, 7
cascade testing, 17
carrier testing, 10
cervical fetal cells, prenatal genetic testing, 13
children
  attitudes towards, 91
  autonomy, genetic relatedness, 136, 139
  self-conception, 145
  well being of, 47
chorion villus sampling, 13
chromosome abnormalities, maternal serum
  screening, 8
  ‘chromosome resection,’ 62
class divisions
  genetic enhancement, 90
  intergenerational justice, 91
cloning
  advantages, 135
  objections to, 42
  autonomy, 42
gene uniqueness, 42
cloning (cont.)
'playing God' argument, 42
'unnatural' argument, 42
support for, 137, 138
cloning to avoid genetic disease, 2, 37–50
advantages, 37
arguments for, 46–48
donor gamete refusal, 47
genetic relatedness, 47, 48
Procreative Beneficence, 46
reproductive freedom rights, 47
well being of child, 47
carrier status, 37, 40–41
advantages, 45
child, negative effects on, 42, 43–45
deceased replacement, 44
non-personal harm notion, 43
open future argument, 44
parental motives, 44
physical effects, 43, 45
psychological harm, 43, 45
specific characteristic choice, 44
criticism of, 140
mitochondrial genetic disease, 37, 38–40, 45
benefits, 45
male partner, 39
unrelated female egg donor, 39
objections to, 41–46
risk vs. benefits, 45
society, effects on, 42, 45–46
prevalence, 45
'slippery slope' argument, 46
waste of resource, 46
colour blindness, 59
community moral obligation, genetic
preselection, 100
conceptions of duty, 96
consistency see 'best opportunity of best life'
obligation
constitutive genetic diseases/disorders, 125
constructionism, 101
context dependence, disability, 55–56
contribution appreciation, lifetime
transcending interests, 94
cost/benefit information, reprogenetic
technologies, 79
costs/economics
financial inequality, parental procreative
autonomy, 75
gender imbalance, 30
liberal eugenics, 120
sex selection, 31
counselling provision, testing facilitation, 154
cystic fibrosis, 40–41
carrier avoidance, 40
see also cloning to avoid genetic disease
carrier testing, 40
newborn screening, 10
pre-implantation genetic diagnosis, 14
deceased replacement, cloning, 44
decision-making process, liberal eugenics, 122
decision-theoretic consequentialism, 53
demographic research, sex selection, 28
descendants, concern for, 92
'designer babies' argument, 32
desired physical characteristics, genetic testing, 17
desire fulfilment theories, 'good life,' 59
diagnosis, genetic testing see genetic testing
disability
avoidance of see Procreative Beneficence
biopsychological correction, 60–61
'lifestyle diseases,' 60
colour blindness, 59
context dependence, 55–56
circumstances, 56
definition of, 55
definition of individual by, 116, 117
refusal of, 123
expected value, 54–55
deafness example, 54
fully correctable, Procreative Beneficence, 64
diagnosis, genetic testing see genetic testing
disability
avoidance of see Procreative Beneficence
biopsychological correction, 60–61
'lifestyle diseases,' 60
colour blindness, 59
context dependence, 55–56
circumstances, 56
definition of, 55
definition of individual by, 116, 117
refusal of, 123
expected value, 54–55
deafness example, 54
fully correctable, Procreative Beneficence, 64
diagnosis, genetic testing see genetic testing
disability
avoidance of see Procreative Beneficence
biopsychological correction, 60–61
'lifestyle diseases,' 60
colour blindness, 59
context dependence, 55–56
circumstances, 56
definition of, 55
definition of individual by, 116, 117
refusal of, 123
expected value, 54–55
deafness example, 54
disease, as disability, 59
disease treatment, 'best opportunity of best
life' obligation, 72
distributive justice, genetic preselection, 108
donor gamete refusal, cloning to avoid genetic
disease, 47
Down syndrome (trisomy 21)
maternal serum screening, 8, 9
prenatal genetic testing, 12
prevalence, 9
Procreative Beneficence, 61
drug therapy, genetic testing, 17
Duchenne muscular dystrophy,
  pre-implantation genetic diagnosis, 14
duty
conceptions of, 96
to the past, 95
economics see costs/economics
education
‘best opportunity of best life’ obligation, 72
liberal eugenics, 103, 106
embryo destruction, pre-implantation genetic
diagnosis, 115
embryo transfer, sex selection, 22
environment
‘best opportunity of best life’ obligation, 71
genetic determinism, 116
maintenance of, intergenerational justice, 89
Procreative Beneficence, 60
equality, universality, 101
essentialism, 133–148
eugenics, 118–122
new see liberal eugenics
old, power of state, 118
expressivist critique, 111–132, 112–113
arbitrary distinctions, 124
constitutive genetic conditions, 125
defence of, 113–116
gene therapy, 114
medical interventions, 113
in utero procedures, 113
disabilities, negative attitudes to, 112
inferiority, 112
termination, 112
discrimination, 124
genenevironmental interactions, 113
identity, 125
parental motivations, 121
policy formulation, 124
social groups, 123, 126
identifications, 121
therapeutic vs. selective interventions, 126
understanding, 123
see also liberal eugenics
family relationships, 87–89
children, attitudes towards, 89
children, autonomy of, 87, 88
genetic enhancement threat, 87
parental responsibility, 88
parental influence concerns, 88
see also genetic relatedness
feminism, gender balanced families, objections
to, 141
fetal cells in maternal blood, prenatal genetic
testing, 13
finances see costs/economics
first-born gender preference, sex selection, 26
fluorescent in situ hybridization (FISH), 12
pre-implantation genetic diagnosis see
pre-implantation genetic diagnosis
(PGD)
folk morality, 51
forensic identification, newborn screening
card, 11
fully correctable disabilities, Procreative
Beneficence, 64
functioning, definition, 56
future child gender importance, gender
balanced families, 145
future responsibility conflict, parental
procreative autonomy, 77
gamete donation
problems, 39
refusal of, 47
gender balanced families, 133, 140–145
biological reductionism, 143
birth-order preference, 142
child self-conception, 145
criticism of, 141
feminism, 141
esentialist assumptions, 143
definition, 143
future child gender importance, 145
gender identity development, 144
gender roles/stereotypes, 144
as morally innocuous argument, 141
procreative autonomy, 141
quality of life considerations, 143
sex selection, 28, 29, 133
specific-gender non-preference, 142
‘gender clinics,’ 28
gender-dependent welfare issues, 31
gender identity development, 144
gender preferences
gender imbalance, 25
in pregnancy, 27–28
gender ratio balance, 26
gender ratio imbalance, 21, 25–27, 141
Asian countries, 29
country dependence, 141
economic reasons, 30
gender preferences, 25
genetic enhancement, 89
religious reasons, 29
service demand, 25
gender roles/stereotypes, 144
gene–environment interactions
expressivist critique, 113
liberal eugenics, 103
generation, definition, 85
gene therapy
expressivist critique, 114
obligations of, 114
 genetic counselling
maternal serum screening, 8
non-directive, 7
genetic determinism
dangers, 116–118
environmental effects, 116
definition, 137
genetic diseases/disorders
avoidance of see cloning to avoid genetic disease
constitutive, 125
definition of, 117
quality of life, 2
testing limitations, 152
genetic enhancement
child autonomy, threat to, 87
intergenerational justice see intergenerational justice
social progress, 95–97
genetic imperatives, 104
 geneticism, 133–148
definition, 137
 see also genetic relatedness
genetic modification, autonomy concerns, 103
genetic predisposition to disease, 15
genetic preselection, 99–109
anticipatory socialization, 101
autonomous morality, 102, 106
community moral obligation, 100
distributive justice, 108
‘liberal principles,’ 99
moral evaluation, 107
‘no harm’ principle, 107
opposition to, 100
religious objections, 100
permissibility of, 102
physical characteristics, 99
subject-independent morality, 108
undesigned, pre-social origins, 106
unilateral acts, 105
genetic relatedness, 134–140
arguments for, 134
see also specific arguments
cloning, support for, 137, 138
cloning to avoid genetic disease, 47, 48
criticism of, 139
identity formation, 138
point of view, 135
preference for, 133
psychological similarity, 134
actualized, 136
child autonomy, 136, 139
environmental factors, 136
genetic basis, 135, 137
perceived, 136
self-knowledge source, 134, 138
value of, 139
Weltanschauung, 134
genetic testing, 7–19
carrier screening in target groups, 7, 9–10
cascade carrier testing, 10
cascade testing, 17
diagnosis, 11–17
confirmation of, 7, 12
future work, 17–18
desired physical characteristics, 17
drug therapy, 17
pharmacogenomics, 17
stem cell research, 17
population screening, 8–11
see also pregnancy screening
prenatal see prenatal genetic testing
genetic uniqueness, objections to cloning, 42
Germany, sex selection surveys, 25, 27
‘good life’
definitions, 59
desire fulfillment theories, 59
objective theories, 59
‘harm principle,’ 23
harms, Procreative Beneficence, 58
health risks, parental procreative autonomy, 76
hedonistic theories, 59
height, parental procreative autonomy
example, 74
haemophilia A, 14
HLA matching, 15
Human Genetics Society of Australasia, 12
human leukocyte antigen (HLA) matching, 15
Huntington disease, 14
Huxley, Aldous, 92
identity, 111–132
alteration argument, 61–62, 114
claims of, 127
expressivist critique, 125
formation of, 138
personal
 genetic vs., 117
philosophy of, 118
improvement principle, intergenerational justice, 87
individual choice, liberal eugenics, 118
individuality, definition by disability, 116, 117
inferiority, negative attitudes to disability, 112
infertility treatment, testing limitations, 153
inherent sexism, sex selection, 31
insemination, sex selection, 22
institutions
 establishment, lifetime-transcending interests, 94
 of justice, intergenerational justice, 91
intellectual disability correction, Procreative Beneficence, 61
interdependency, 101
intergenerational justice, 4, 85–87, 85–97
environmental maintenance, 89
family relationships see family relationships
generation definition, 85
genetic enhancement, 89–90
class divisions, 90
gender ratio imbalance, 89
mutual respect, 90
social order problems, 89
improvement principle, 87
‘just savings principle,’ 86
lifetime-transcending interests, 92–95
contribution appreciation, 94
definition, 93
descendants, concern for, 92
duties to the past, 95
institution establishment, 94
social contracts, 93
values, changes in, 94
prerequisites, 91
children, attitudes towards, 91
class divisions, 91
institutions of justice, 91
requirements of justice, 92
resources, 86
social progress, 95–97
conceptions of duty, 96
duty towards, 95
Procreative Beneficence, 96
young, duties to, 86
intergenerational relationships, definition, 86
in utero procedures, expressivist critique, 113
in-vitro fertilization (IVF), pre-implantation genetic diagnosis, 14
judgement challenges, ‘best opportunity of best life’ obligation, 73
jurisdiction problems, testing limitations, 153
justice
distributive, 108
institutions of, 91
intergenerational see intergenerational justice
parental procreative autonomy, 76
requirements of, 92
‘just savings principle,’ intergenerational justice, 86
legislation, 4, 149–157
abortion limitations, 150–151
amendments, 151
religion, 151
ultrasound, 150
none, 154–155
health professional decision, 154
professional guidelines, 155
sex selection, 23
testing facilitation, 154
counselling provision, 154
state interest, 154
testing limitations, 151–153
definition changes, 152
genetic diseases/disorders, 152
infertility treatment, 153
jurisdiction problems, 153
permitted conditions, 153
sex selection, 151, 152
sexual changes, 152

Index

liberal eugenics
  costs, 120
  criticism of, 103
  decision-making process, 122
  definitions, 99
    unwanted characteristics, 119
  education effects, 103, 106
  gene–environment interactions, 103
  individual choice, 118
  preferred characteristics, 119, 120
  technology effect, 119
  state involvement, 120, 121
  'superior genes,' 119
  liberalism
    genetic preselection, 99
    neutrality, 100
    political, 100
  licensing, sex selection, 32
  ‘lifestyle diseases,’ disability, 60
  lifetime-transcending interests see
    intergenerational justice
  maternal serum screening see pregnancy
  screening
  mate selection, 71
  medical interventions, expressivist critique, 113
  medical risks, 2
  MicroSort, 22
  sex selection surveys, 26
  minority races, 4
    see also racial discrimination
  mitochondrial genetic disease
    avoidance see cloning to avoid genetic
    disease
  donor egg IVF, 39
  moral recognition, 101
  mutual respect, genetic enhancement, 90
  myotonic dystrophy, 14

  natural birth order, sex selection, 30
  neutrality, liberalism, 100
  newborn screening, 10–11
    cystic fibrosis, 10
  newborn screening card see newborn
    screening card (NBS Card)
  phenylketonuria, 10
  tandem mass spectrometry, 10
  newborn screening card (NBS Card), 10–11
    diagnosis, 10–11
    forensic identification, 11
  quality assurance, 10–11
  research, 11
  ‘no harm’ principle, genetic preselection, 107
  non-classical heritable disease, 15
  non-directive genetic counselling, 7
  non-disease characteristic selection, 69
  non-personal harm notion, 43
  objective theories, ‘good life,’ 59
  open future argument, 44
  opportunity costs, procreative beneficence, 58
  ovarian hyper-stimulation syndrome (OHSS), 76
  parental culpability for harm see ‘best
    opportunity of best life’ obligation
  parental influence concerns, 88
  parental motives
    cloning to avoid genetic disease, 44
    expressivist critique, 121
    parental procreative autonomy, 69–83, 73–74, 99
    ‘best opportunity of best life’ obligation see
    ‘best opportunity of best life’ obligation
    cloning to avoid genetic disease, 47
    disadvantaged groups, 76–79
    African Americans, 78
    indigeneous Australians, 78
    racism increase, 78
    skin colour choice, 78
    entitlement of, 70
    interference in, 74–79
    non-disease characteristic selection, 69
    relative trait enhancement, 74–75
      height example, 74
      traits, 74
      value of, 70
    right to, 2
    social disadvantage increase, 75–76
      financial inequality, 75
      justice concerns, 76
      State subsidies, 76
    social interference, 70
    women’s rights/roles, 3, 74, 76–79
    future responsibility conflict, 77
    health risks, 76
    unplanned vs. unwanted pregnancies, 77
    parental responsibility, 88
    performance capacity, autonomy, 108
permitted conditions, testing limitations, 153
pharmacogenomics, genetic testing, 17
phenylketonuria, newborn screening, 10
physical characteristics, desired, genetic testing, 17
physical effects, cloning to avoid genetic disease, 43, 45
‘playing God’ argument, cloning, objections to, 42
point of view, genetic relatedness, 135
policy formulation, expressivist critique, 124
political liberalism, 100
polymerase chain reaction (PCR), 14
pre-implantation genetic diagnosis, 14
prenatal genetic testing, 13
population screening, genetic testing, 8–11
post-metaphysical thought, 102
potential achievements, importance of, 149
predictive testing, prenatal genetic testing, 16–17
preferred characteristics, liberal eugenics, 119, 120
pregnancy, gender preferences, 27–28
pregnancy screening, 8–9, 155–156
maternal serum screening, 8–9
chromosome abnormalities, 8
Down syndrome, 8, 9
genetic counselling, 8
prevalence, 9
spina bifida, 8
timing, 9
ultrasound screening, 9
see also specific tests
pre-implantation genetic diagnosis (PGD), 8, 14–16, 37, 114
conditions, 156
aneuploidy testing, 16
beta thalassaemia, 14
cystic fibrosis, 14
Duchenne muscular dystrophy, 14
genetic predisposition to disease, 15
haemophilia A, 14
HLA matching, 15
Huntington disease, 14
myotonic dystrophy, 14
non-classical heritable disease, 15
fluorescent in situ hybridization, 14
deficiencies, 16
IVF, 14
PCR, 14
sex selection, 15
stem cell transplant selection, 15
support of, 114
unwanted embryo destruction, 115
prenatal diagnosis, 37
prenatal genetic testing, 7, 12–14
advanced maternal age, 12
amniocentesis, 13
cervical fetal cells, 13
chorionic villous sampling, 13
Down syndrome (trisomy 21), 12
fetal cells in maternal blood, 13
fluorescent in situ hybridization, 12
PCR, 13
predictive testing, 16–17
prevalence, cloning to avoid genetic disease, 45
privileged groups, 79, 80, 81
procreative autonomy, gender balanced families, 141
Procreative Beneficence, 3, 51–67, 149
autonomy, 65–66
social correction, 65
benefits vs. risk, 53
identifying selection example, 62
cloning see cloning to avoid genetic disease as decision theoretic consequentialism, 58
objections to, 57
definition, 43
‘different’ individual production, 115
Down syndrome example, 61
duty of, 100
environmental selection, 60
expected value, 52–53
harm, 58
identity alteration argument, 61–62
intellectual disability correction, 61
intergenerational justice, 96
non-negative attitudes to disability, 113
objections to, 52
‘best life’ impossibility, 57
disabled community, 111
see also specific objections
obligation to have best child, 52
Pareto optimality, 52
opportunity costs, 58
opportunity restriction, 63–65
fully correctable disabilities, 64
Pareto optimality, 63–65
self-choice, 64
phenotype changes, 114
principles, 51–52
Procreative Beneficence (cont.)
treatment vs. enhancement, 63
basic parenting principles, 63
see also disability
psychological harm, cloning to avoid genetic
disease, 43, 45
psychological similarity see genetic relatedness
quality assurance, newborn screening card,
10–11
quality of life
disability, 55, 57
genetic defects, 2
racial discrimination, 4
parental procreative autonomy, 78
White advantages, 79
random distribution, reprogenetic
technologies, 81
regulation
reprogenetic technologies, 79
see also legislation
relative trait enhancement, parental
procreative autonomy see parental
procreative autonomy
religion
abortion limitations, 151
gender imbalance, 29
genetic preselection objections, 100
sex selection objections, 24
reproductive freedom see parental procreative
autonomy
reprogenetic technologies, 37
access to, 79–81
allocation of limited resources, 80
cost/benefit information, 79
privileged groups, 79, 80, 81
random distribution, 81
regulation, 79
social context effects, 80
definition, 69
see also parental procreative autonomy
resources
intergenerational justice, 86
waste of, cloning to avoid genetic disease, 46
Royal Australian and New Zealand College of
Obstetrics and Gynaecology, 12
self agency measures, autonomy, 104
self-knowledge source, genetic relatedness,
134, 138
service demand, gender imbalance, 25
sexism, sex selection argument, 31
sex selection, 2, 3, 21, 111
abortion, 21
criticism, 1
‘designer babies’ argument, 32
inappropriate use of technology
argument, 25
inherent sexism argument, 31
natural birth order, 30
religious objections, 24
technology for medical benefit argument,
24
‘unnatural’ argument, 24
demographic research, 28
embryo transfer, 22
esentialist assumptions, 140–145
see also gender balanced families
finances, 31
‘gender balanced families’ see gender
balanced families
gender-dependent welfare issues, 31
gender ratio imbalance see gender ratio
imbalance
historical aspects, 21
insemination, 22
legislation, 23
licensing, 32
MicroSort, 22
non-criticism of, 123
pre-implantation genetic diagnosis, 15
surveys, 25–27
first-born gender preference, 26
gender balance, 26
‘gender clinics,’ 28
Germany, 25, 27
MicroSort use, 26
moral attitudes, 27
pregnancy effects, 27–28
technology effects, 27
UK, 25, 27, 28
USA, 25, 27, 28
testing limitations, 151, 152
unequal access issues, 31
world wide ban, call for, 30
X-linked disorder prevention, 22
skin colour
choice of, 78
as disability, 62
’slippery slope’ argument, cloning to avoid
genetic disease, 46
social contracts, lifetime-transcending interests, 93
social identities, 125
social progress
  genetic enhancement, 95–97
  intergenerational justice see intergenerational justice
society
  ‘best opportunity of best life’ obligation, 72
  cloning effects see cloning to avoid genetic disease
order problems, genetic enhancement, 89
parental procreative autonomy, 70
reprogenic technology context, 80
sorting society, definition, 1, 111
specific characteristic choice, cloning, 44
specific-gender non-preference, gender balanced families, 142
sperm sorting, 15
spina bifida, 8
state involvement, 3
  liberal eugenics, 120, 121
  reprogenic technology subsidies, 76
stem cell research, 150
genetic testing, 17
  pre-implantation genetic diagnosis, 15
subject-independent morality, 108
  ‘superior genes,’ 119
tandem mass spectrometry, newborn screening, 10
technology
  changes, testing limitations, 152
  inappropriate use of, sex selection, 25
  for medical benefit argument, sex selection, 24
termination see abortion
The Time Machine (Wells), 92
timing, maternal serum screening, 9
ultrasound
  abortion limitations, 150
  diagnostic tests, 11–12
  anatomy, 11
  pregnancy screening, 9
  understanding, expressivist critique, 123
unequal access issues, sex selection, 31
unilateral acts, genetic preselection, 105
UK, sex selection surveys, 25, 27, 28
‘unnatural’ arguments
  cloning, objections to, 42
  sex selection, 24
unwanted characteristics, definitions, 119
unwanted embryo destruction,
  pre-implantation genetic diagnosis, 115
USA, sex selection surveys, 25, 27, 28
values, changes in, 94
waste of resource, cloning to avoid genetic disease, 46
well being of child, cloning to avoid genetic disease, 47
Wells, H. G., 92
Weltanschauung, 134
Western pleuralistic society, 23
women’s rights/roles
  parental procreative autonomy see parental procreative autonomy
reproductive freedom, 3
world wide ban, sex selection, 30
X-linked disorder prevention, 22