

Biosocial interactions in modernization

3. Individual variation and individualism

3. Individual variation and individualism

- 3.1. Evolutionary determinants of individual variation
- 3.2. Individual-societal interdependencies in modern society

Basic questions

- **Why do people within a population **differ** from each other?**
- **How is this variation linked to attitudes about individual variation, such as **individualism**?**

What is the importance of individual variation?

➤ Proximately:

- Most people find the perspective of a **uniform** humanity, as deluded in some science-fiction stories, quite creepy;
- the study of inter-individual differences is important because it can help to resolve **societal problems**, such as inter-individual relations and conflicts, control of criminality, treatment of diseases, valorization of talent, promotion of social welfare and wellbeing.

➤ Ultimately: individual variation is a condition for further **evolution and adaptation** to changing environments.


The genetic unique identity of the individual

- In humans 99.6 to 99.8% of nucleotides are identical, but the other 0.2–0.4% nucleotides (**± 10 million DNA variants**) can potentially occur in different combinations;
- This represents a very small fraction of the total genome, but is vastly more than enough variation to ensure **individual uniqueness** at the DNA level.
- With the exception of monozygotic **twins**, where the segregation-recombination-mechanism is being bypassed, no two individuals have the same genome.



The individual has a unique genetic identity.

The level of selection: individual or group selection?

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- **Darwin**: selection at the **individual** level of organization;
 - Post Social-Darwinist era: **group selection**;
 - Williams (1966): the gene as unit of selection; Dawkins (1976): '**The selfish gene**';
 - End of the 20th century: group selection re-emerged as an important component of a **multilevel theory** of evolution;
 - **Currently**: discussion on the relative importance of individual, kin and group selection **continues with great intensity**.

Within- and between-group selection

- In the discussions about individual or group selection, not always sufficient **distinction** is made between within-group and between-group selection;
- Within-group selection: refuted because **incompatible** with individual selection (Williams, Maynard Smith, Trivers);
- Between-group selection: **powerful mechanism** of selection between groups or populations, producing changes in gene pool compositions.

Within-group selection

- A mutant that **limits** the reproductive capacity of its bearer, emerges in a population that over-exploits its environment.
- Obviously, this benefits the total population and allows the other members of the group to **increase** their reproductive fitness.
- Because the bearer(s) of this fertility limiting mutant will produce a smaller number of offspring, this 'altruist' mutation will be **exterminated** by means of individual selection.
- Within-group selection is, in other words, **incompatible** with individual selection.

Within- and between-group selection in the human

- **Competition** between biological and cultural transmission systems:
 - **Biological transmission system: ‘Darwinian’** vertical transmission needing the individual funnel for passing genes from parents to offspring;
 - **Cultural transmission system: ‘Lamarckian’** horizontal transmission of acquired characteristics;
- **Result:** individual **within-group selection** may be weakened or eliminated, thereby increasing the likelihood of **group-beneficial traits** evolving.

The adaptive significance of individual-transcending levels of organization

- The **individual** level of organization:
 - Ultimately moving power of human action;
 - Vehicle for transmitting genes.
- The **population** level of organization:
 - **Primary** function: instrumental role of significance with respect to individual survival and reproduction;
 - **Secondary** role: bearer of an intergenerationally emerged **cultural heritage** and transmitter of values and knowledge:
 - exosomatic survival instrument;
 - exceeds the absorbing capacity of the individual.

Between-group selection

- Two theories:
 - the human is intrinsically a **peace-loving**, non-aggressive species;
 - The human has the need for resource acquisition (women, slaves, territories, nutritional and material resources) and is endowed with strong drives towards **competition and aggression**.
- The historical record supports strongly the second theory:
 - The **extermination** of the pre-sapiens hominids;
 - The omnipresence of **intergroup warfare**;
 - The submission and exploitation of '**outgroups**', wherever opportunities exist.

Biological sources of individual variation

- **General variation:** differences between individuals resulting from **mutations** and selective processes, as well as from differential **environmental** influences;
- **Age variation:** changes individuals undergo in the course of their ontogenetic development;
- **Sexual variation:** in addition to between-sex differences, there is also within each sex a variation in masculinity-femininity;
- **Racial variation:** biological differences that originate, through migration, from inter-population variability.

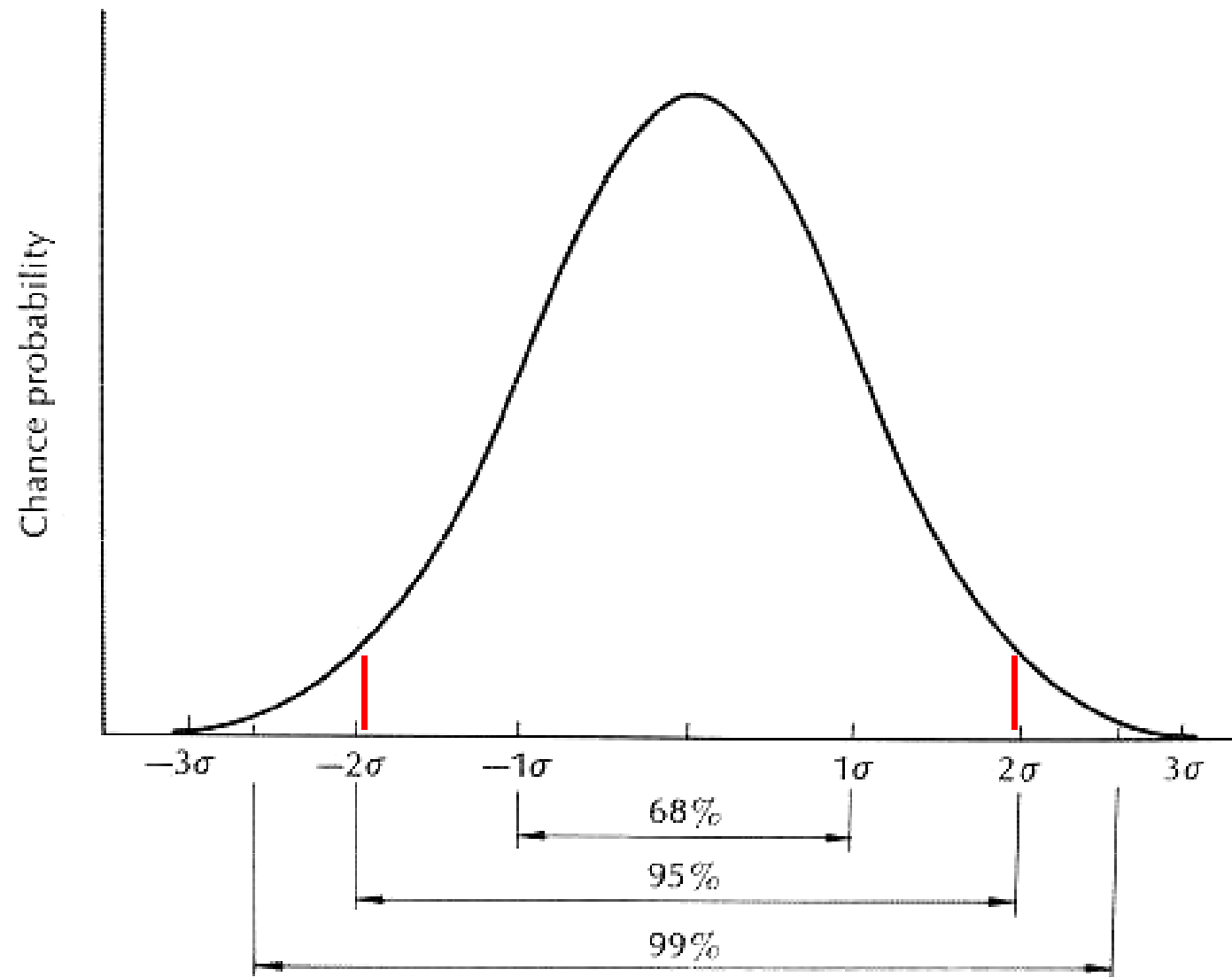
Normality-abnormality

- The **concepts** of normal and abnormal can have two meanings:
 - corresponding/deviating of what is prevalent in **majority**;
 - corresponding/deviating from the **norm** according to which one should behave.
- Approaches or practices **distinguishing** normality from abnormality:
 - **Statistics**: norm of $\pm 1.96s$ of a normal distribution to distinguish the normal probability area of 95 percent from the two eccentric areas of each 2.5 percent, in total 5 percent;
 - **Medical sciences**: often define the 'normal' (= healthy) variation in the population on the basis of samples of people who are in **good health**;
 - **Evolutionary biology**: normality is defined on the basis of **genetic fitness**, i.e. on the basis of survival probabilities and differential reproduction.

General variation within the normality range

- How to explain the **general biological variation** within the '**normality**' range of the Gauss distribution (e.g. within the 95% probability range, leaving both the two-sided excentric areas of 2 x 2.5% in the aside)?
- = Mutations or developmental variation under influence of internal or external environmental factors which are **not harmful** either for the ontogenetic development of the individual or for his reproduction.

95% probability area and excentric areas of 2.5%



Explaining maladaptive traits

- Definition of maladaptive trait
 - Intra-generationally (ontogenetically): decreases the development of **human-specific characteristics** (e.g. sociality, intelligence);
 - Intergenerationally (phylogenetically): decreases the **genetic fitness** (intergenerational transmission of genes).
- Causes of the **presence** of maladaptive traits:
 - Deleterious **mutations**;
 - **Unfavourable environments**;
 - **Changed environments**, transforming earlier advantageous traits into disadvantageous characteristics or behaviour;
 - increasing **longevity** which allows the appearance of post-reproductive degenerative diseases due to the decreasing force of selection;
 - in modern culture, the conservation or even promotion of less favourable mutants or behavioural patterns because they have sufficient survival value in the culturally or economically **protected environment** or are even fostered by such environments.
- Causes for the **reproduction** of maladaptive traits:
 - **Incomplete selection** against maladaptive traits.

Criminality: an example of individual variation and (?) maladaptivity

- Individual variation
 - Intra-individual
 - Between individuals
 - Between groups
- Is criminal behaviour
 - Adaptive or
 - Maladaptive ?

Criminality: value and norm dependent

- Criminal behaviour: dependent upon value and norm system, e.g.
 - **In-group/out-group bias:**
 - Violent behaviour towards others in times of peace and war;
 - Ethnic and racial prejudice.
 - **Social class bias:**
 - Crude versus sophisticated forms of competition;
 - Ecological, fiscal, informatic crimes.
 - **Sexual bias** (in pre-modern value systems?)
 - Virginity;
 - Extra-marital intercourse;
 - Divorce and inheritance rights.

- Current rules-abiding systems: not completely free from various forms of **bias**.

Criminal behaviour?

- Violent behaviour
- Cheating behaviour

Violent behaviour



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Cheating behaviour

Biosocial Criminology: important and delicate

- **Important**, because criminality is in modern culture still a frequently prevailing phenomenon involving high social and human cost, **all causes** of which should be effectively considered;
- **Delicate**, because here again the prejudice appears that (partial) biological or genetic influences on norm-violating behaviour imply **unchangeability or incurability**, and consequently imply that
 - **social action** is redundant, or
 - **personal responsibility** needs no longer to be the basis for a just judicial procedure.

Criminology and Biosocial criminology

- Criminology: in recent decades, a slow shift from the earlier, ideologically strongly influenced, **social-environmentalist theory** of criminal behaviour towards a more interdisciplinary approach in which **bio-social criminology** takes a more prominent place;
- This shift is probably due to the remarkable **recent progress** of several biological disciplines, but also to the **disappointing results** of policies which are only founded in social theory.

Recent English language books on biosocial criminology

- Mednick, S., K.O. Christiansen (1977), *Biosocial Bases of Criminal Behavior*. New York: Gardner Press.
- Wilson, J.Q., R.J. Herrnstein (1985), *Crime and Human Nature*. New York: Simon & Schuster.
- Raine, A. (1993), *The psychopathology of crime: Criminal behavior as a clinical disorder*. San Diego: Academic Press.
- Moir, A., D. Jessel (1995), *A Mind to Crime. The Controversial Link between the Mind and Criminal Behaviour*. London: Penguin Books.
- Rowe, D. (2002), *Biology and Crime*. Los Angeles: Roxbury.
- Walsh, A. (2002), *Biosocial Criminology. Introduction and Integration*. Cincinnati: Anderson.
- Walsh, A., L. Ellis (eds) (2003), *Biosocial criminology: Challenging Environmentalism's supremacy*. New York: Nova Science.

Backbones of biosocial criminology

Recent developments of three large biological fields of study:

➤ **Genetics:**

- Molecular genetics
- Behavioural genetics

➤ **Neurology:**

- Neuro-physiology
- Psychophysiology

➤ **Evolutionary biology:**

- Sociobiology
- Behavioural ecology
- Evolutionary psychology
- Paleontology and archeology
- Ethnography
- Primatology

Genetics and criminality

- Karoytypology: XYY
- Molecular genetics: e.g. MAO
- Behaviour genetics
 - Kinship
 - Adoption
 - Intelligence
 - Personality

Karyotypology and criminality

- XYY men are relatively **more present** in penitentiaries and psychiatric institutions than can be expected on the basis of their prevalence in the population;
- XYY men are **very tall** (average body height = 1.90), have a higher **testosteron** level, but a somewhat **lower average intelligence**;
- They have a higher propensity towards **aggressive behaviour** and come more often in conflict with the law; however, only a minority of XYY men manifest criminal behaviour.
- Multivariate research showed that the XYY karyotype is not directly, but **indirectly** – via a lower intelligence level – related to norm-violating behaviour.

Molecular genetics and criminality

- A point mutation of the MAO-A gene on the X-chromosome is responsible for the failure to produce the enzyme **monoamineoxydase A** which plays a role in the metabolism of neurotransmitters;
- This point mutation produces in men **extremely violent behaviour** (arson, rape, tantrum, aggression);
- Since men have only **one X chromosome**, the mutated MAO-A gene manifests itself immediately phenotypically, though via the action of neurotransmitters.

Behaviour genetics and criminality: results from twin and adoption research

➤ Twin studies:

- Virtually all twin research about criminal behaviour shows a significantly **higher concordance** among monozygotic than among dizygotic twins, even after control for a number of mediating factors (31%-13%). Those data do not prove that criminal behaviour is genetically determined, but that the presence of **particular genotypes** in criminogenous circumstances can more easily lead to criminal behaviour.

➤ Adoption studies:

- The influence of the **biological father** on the criminal behaviour of the adopted is twice to three times as large as the effect of the adoption father.
- **Chronic offenders** – life course persistent delinquents – have a larger probability of having biological parents with several convictions.
- The largest effect comes from the **combination** of ‘bad’ genes and ‘bad’ environment, not from a bad environment in se.

Crime concordance among twins

TABLE 2 Averaged Twin Concordance Rates Weighted by Sample Size for Selected Twin Studies

Selection criterion	MZ twins		DZ twins		MZ/DZ concordance ratio
	% Concordance	(N)	% Concordance	(N)	
Total sample	51.5	(262)	20.6	(345)	2.5
Excluding Stumpfl (1936) and Kranze (1935)	48.1	(212)	14.5	(283)	3.3
Excluding small samples (single-digit studies)	50.8	(242)	20.4	(319)	2.5
Zygoty estimated by blood	53.5	(99)	28.0	(125)	1.9
Males only	53.8	(238)	21.7	(312)	2.4
Females only	29.2	(24)	9.1	(33)	3.2
Post-1975 studies only	31.0	(116)	12.9	(201)	2.4

Crime figures in cross-fostering adoption

(Mednick et al., 1984; *Bohman et al., 1982*)

		Criminality among biological parents	
		Yes	No
Criminality among adoptive parents	Yes	24.5% 40%	14.7% 7%
	No	20.0% 12%	13.5% 3%

Interaction between biological and social factors

The relation between biological (genetic) factors and criminal behaviour depends on the **socio-economic status**:

- the relation between biological (genetic) factors and criminal behaviour manifests itself in **socially higher and middle classes**, but
- Less or not in **lower social classes** where unfavourable living conditions mask the effects of biological (genetic) differentiation.

Behaviour genetics and criminality: intelligence

- Intelligence is a **major correlate** of criminal behaviour ($\Delta IQ \sim 17$ between non-offenders and life-course persistent offenders);
- Offenders also are overrepresented by about 2.2 on **performance intellectual imbalance** ($P > V$);
- IQ difference not explained by difference in **detection** (undetected delinquents are not brighter than the detected);
- Controlling for **SES** only weakens slightly the IQ difference between offenders and non-offenders;
- The **crime increase** in recent decades in some countries is not related to changes in IQ, but to factors such as family break down, morality breakdown, increased intellectual demands for job recruitment.

Behavioural genetics and crime: personality

- **Delinquents** are more extravert, impatient, irritable, aggressive, asocial, unconventional, assertive, and emotionally unstable.
- They show **less fear** and are **less sensitive** to reprimand, and punishment;
- Delinquents often show **psychopathic** personality characteristics.

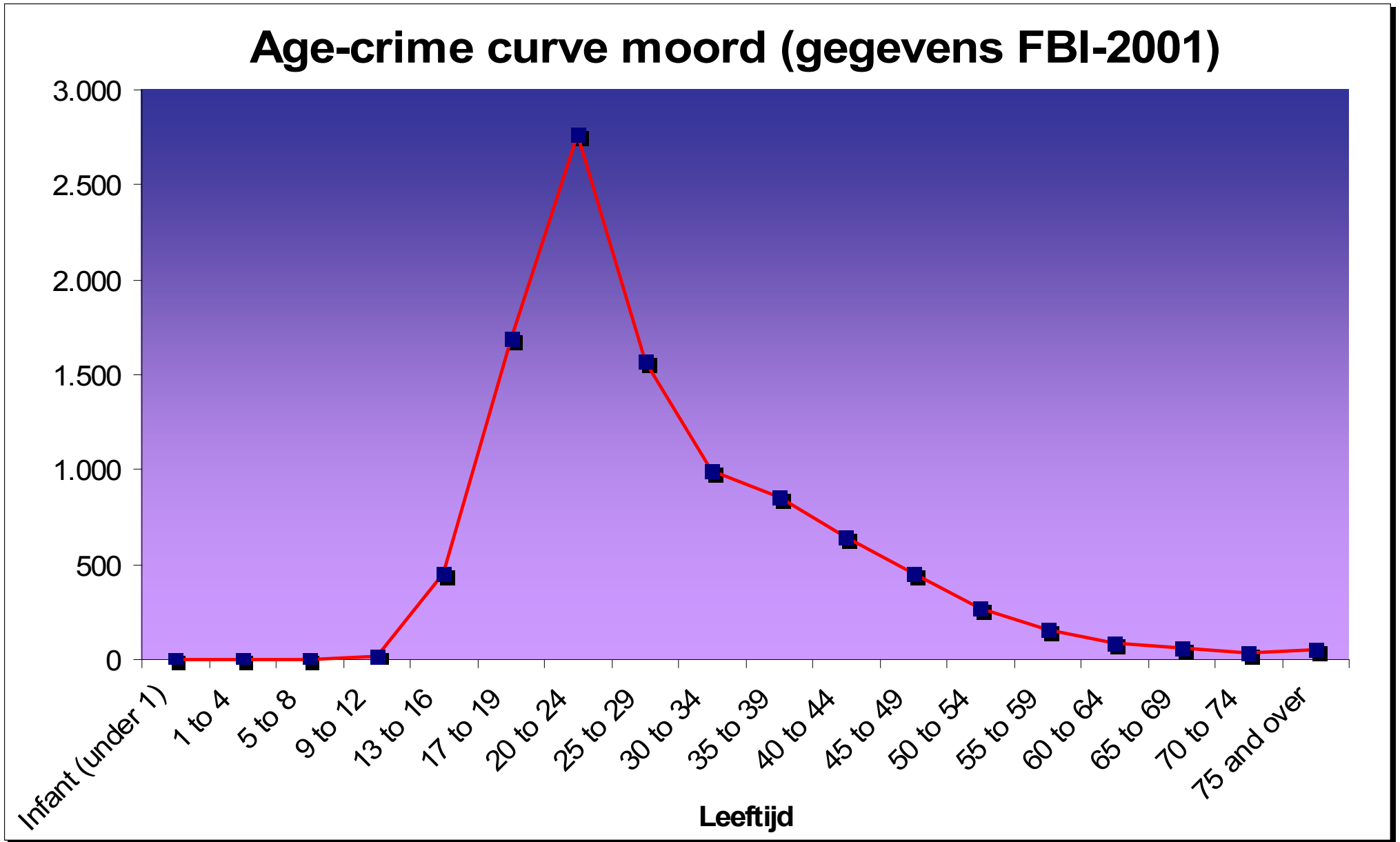
Psycho-physiology, neuro-physiology, neuro-chemistry and antisocial behaviour/criminality

- **Psycho-physiology:**
 - **low reactivity of the autonomic nervous system** (skin conductance, heart rate): increased risk of antisocial behaviour or criminal behaviour;
 - **EEG**: high prevalence of abnormalities among violent criminals, especially in recidivistic offenders;
- **Neuro-physiology:**
 - Defects in the **prefrontal lobes**: conduct disorder (CD), attention deficit hyperactivity disorder (ADHD), ASPD (antisocial personality disorder); higher prevalence among violent criminals;
 - Lower **gray matter** in prefrontal region: predictive for antisocial behaviour
- **Neuro-chemistry:**
 - Neurotransmitters: low **serotonine** level and high level of **norepinephrine**: linked to impulsive and aggressive behaviour;
 - Hormones:
 - **Testosteron**: Delinquents show systematically higher androgen levels; the relation is most outspoken for violent criminals;
 - **Premenstrual syndrome**: increased risk of criminal behaviour during the paramenstruum (sudden decrease in progesteron).

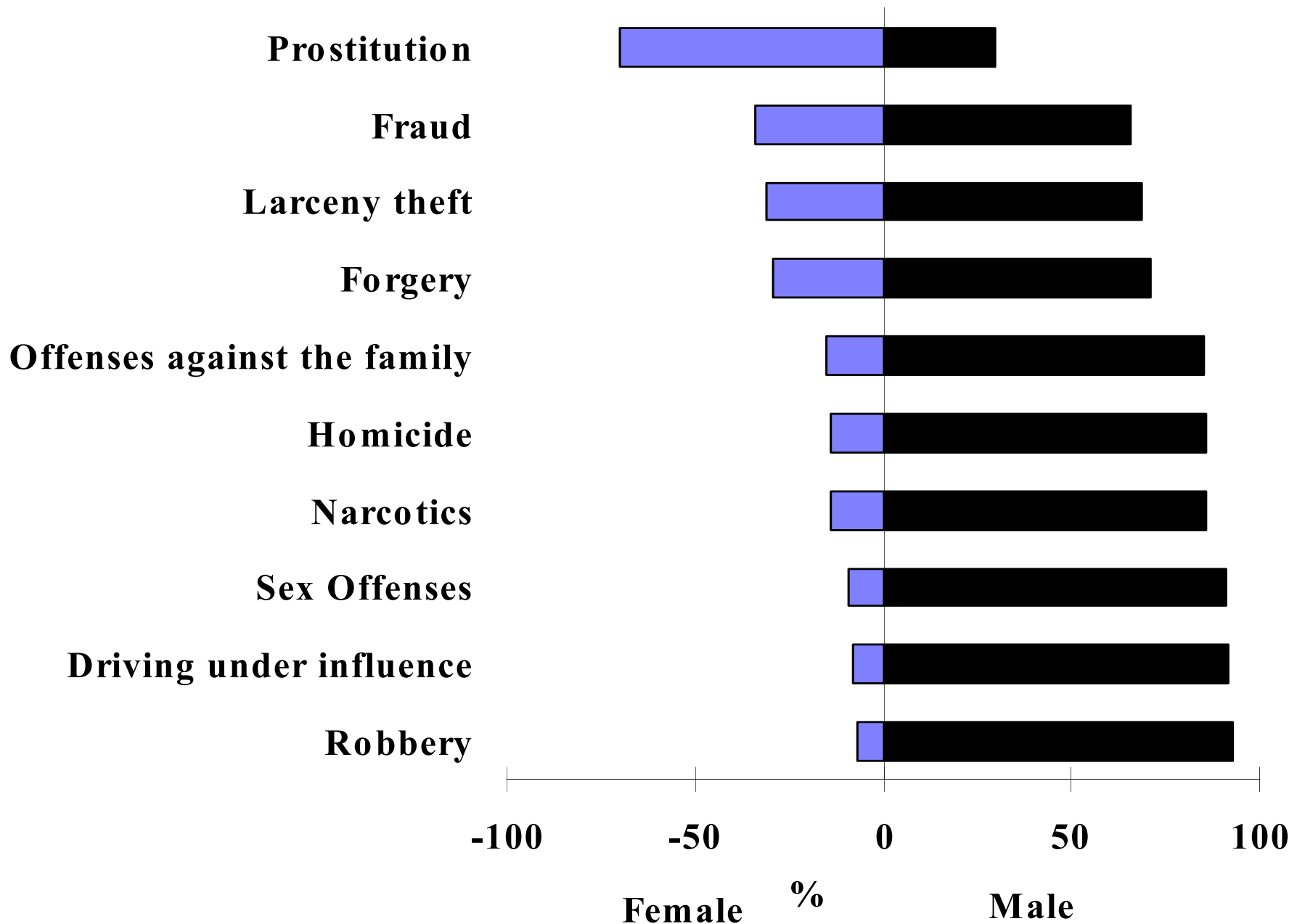
Sociobiology and crime

- Sex-age life course crime curve
- Sex ratio and crime
- Kinship relations and crime
- In-group/out-group relations

Murder age-crime curve



Sexual differences in criminality

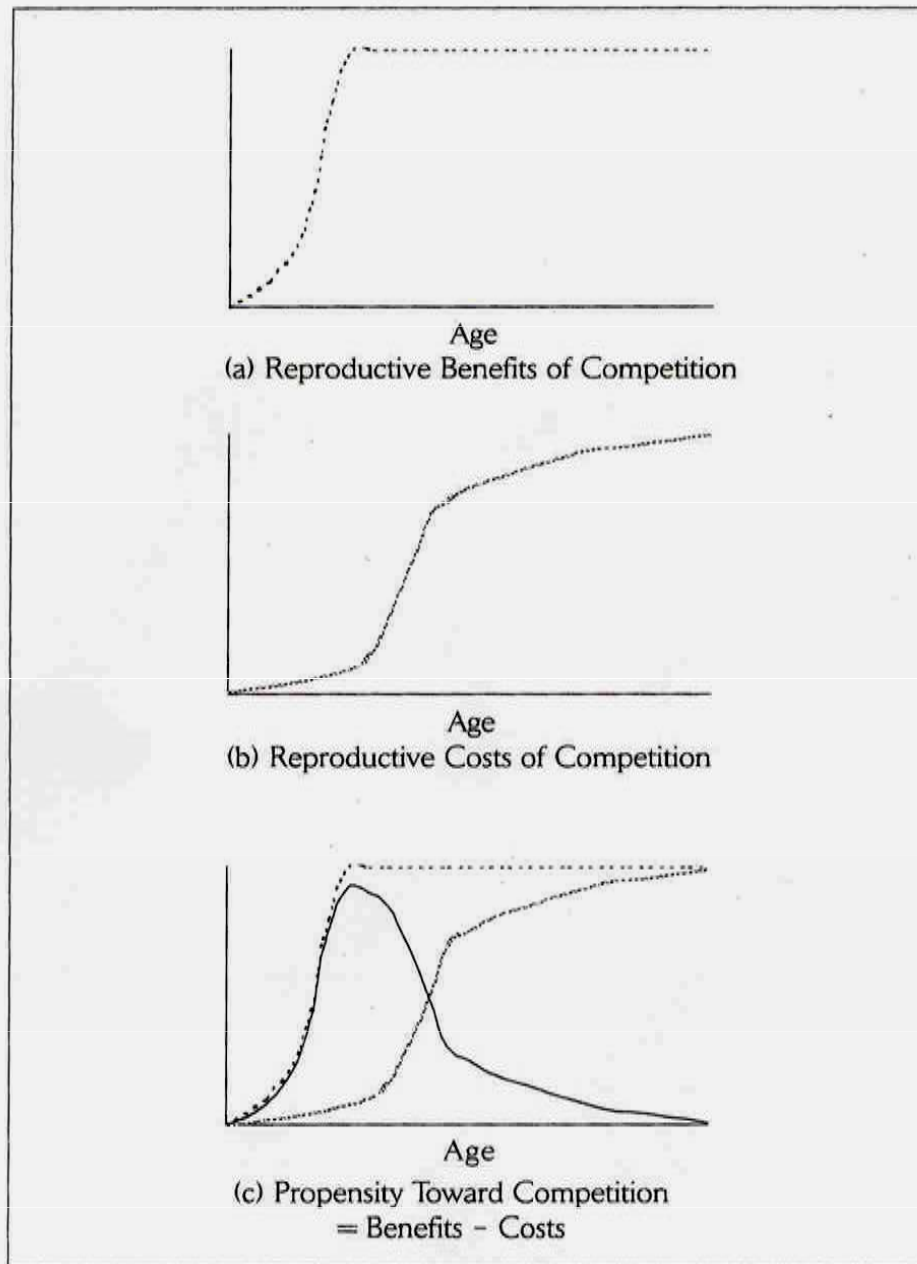


The sex-age life course crime curve

- Differentials:
 - **Sex** produces the most significant difference in criminal behaviour (♂ >>> ♀).
 - **Age** forms the second most important differential factor in criminal behaviour. Violent criminality peaks at (male) adolescent and young-adult age.
- Sociobiological explanation of male life course curve in criminality:
 - **Mating efforts** precede parenting efforts;
 - Reproductive efforts shift from mating to **parenting efforts**
 - Reproductive **benefits** of competition correlate with degree of mating efforts;
 - Reproductive **costs** of competition increase with degree of parental efforts;
 - **Propensity towards competition** = benefits – costs.
 - NB. Idem for age-**creativity** life course curve.

Benefit-cost analysis of competition during the life course

The Benefits and Costs of Mating Competition and the Age Crime Curve



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Sex ratio and crime (Walsh, 2003)

- **Low** sex ratio (less males than females):
 - Females: **scarce resource**;
 - Males: **mate effort** > parenting effort; increased promiscuity; elevated testosterone levels, low serotonin levels;
 - Society: unstable, **misogynistic**, licentious;
 - High **illegitimacy**, high **single mother** households;
 - High **male crime** rates;
 - Sex ratio strongest demographic **predictor of crime** rates in American Black community;
 - Other **more individual level** explanations?
- **High** sex ratio (more males than females):
 - Opposite trends

Kinship relations and crime

Table 2. *Sibling correlations on aggression*

Group	School-level family warmth	
	High	Low
Monozygotic twins	56*	42*
Dizygotic twins	33*	31*
Full siblings	18*	17*
Half siblings	07	- 10
Unrelated siblings	- 03	21*

Note Sibling correlations were computed in Level 1 of the hierarchical linear model

* $p < .05$, two-tailed

Other anthropological studies and criminality

- Biometry
 - Body build: **endomorph mesomorphs** (Sheldon's classification of constitution types) predominate among delinquents;
- Paleontology and archaeology:
 - Multiple indications of **homicide**, cannibalism, group conflicts;
- Ethnography and history:
 - **In-group/out-group conflicts** in prehistory, among hunter-gatherers, as well as agrarian and industrial populations;
- Primatology:
 - Intergroup conflict among **Chimpansees**.

Evolutionary biology and criminality

- Biological (genetic) predisposition for competitive, aggressive, violent, and cheating behaviour = adaptation to **EEA** (environment of evolutionary adaptedness);
- Predispositions **interact** with environmental factors (values and norms, accessibility to resources);
- **Alternative adaptive strategies:**
 - **Primary** strategy for ASPDs (antisocial personality disorder);
 - **Secondary** strategy for most other individuals, largely dependent on environmental deprivation;
- In modern society: aggressive, violent, cheating behaviour has become **inadaptive**.

Biosocial criminology: in conclusion

- The identification and evaluation of behavioural variants depend more or less on the **cultural values and norms** in society;
- Criminal behaviour is often the result of the **interacting or covarying effects of** biological and social factors;
- Biological determinants of criminal behaviour can be of **genetic or non-genetic origin**;
- Some biological (genetic) factors **facilitate**, others **hamper** the acquisition of socially desirable behaviour;
- From an evolutionary point of view, criminal behaviour is to be considered as a **secondary adaptive strategy**, but in some cases it is a **primary adaptive strategy**.

3. Individual variation and individualism

- 3.1. Evolutionary determinants of individual variation
- 3.2. Individual-societal interdependencies in modern society

3.2. Individual-societal interdependencies in modern society

- One of the most important areas of tension in human societies concerns the relation between **individual and population**;
- Broad range of philosophical/ethical/political **theories**, with as extremes:
 - absolute priority to the **individual**
 - strong preferential treatment of the **population**;
- **Biosocial approach**: can nuance and deepen the insight in that relationship.

Biosocial approach to the relationship between individual and population

Three major domains of **biosocial input**:

- The **ontogenetic** interdependency between individuals
- The **genetic** interrelationship between individual and population
- Individual **competition** versus social **cooperation**

The ontogenetic interdependency between individuals

Two human-specific fundamental causes:

- the shift from an automatically programmed behaviour towards a **conscious control of behaviour** through the development of the large brain hemispheres;
- the relatively short pregnancy duration resulting in the **premature birth** of the newborn.

The human specificity of ontogenetic interdependency in modern culture

- Socio-biological dependency of the human child and adolescent as well as the interdependency of the adults increased and prolonged as human culture and society became **more complex**;
- Caretaking for the growing infants, adolescents and young adults **transcends** by far the role of parents and other kin;
- The increasing importance given to individual **emancipation and equality of opportunities** largely enhance the mutual interdependencies between individuals and groups in society;
- Increasing longevity, caretaking functions increasingly are needed for **elderly people**.

The genetic relation between individual and population: the past

- Individual: **two** sets of chromosomes
- Two generations ago: maximally divided over **four grandparents**, with an average gene contribution of $\frac{1}{4}$ per grandparent;
- Ten generations ago (~ 1700 AD): the genes of an individual were distributed over maximum 2^{10} = **1024 individuals**;
- Twenty generations ago (~1400 AD): the genes of an individual could have been distributed over 2^{20} (= more than **one million**) individuals, i.e. the total or the largest part of the population.

The genetic relation between individual and population: the future

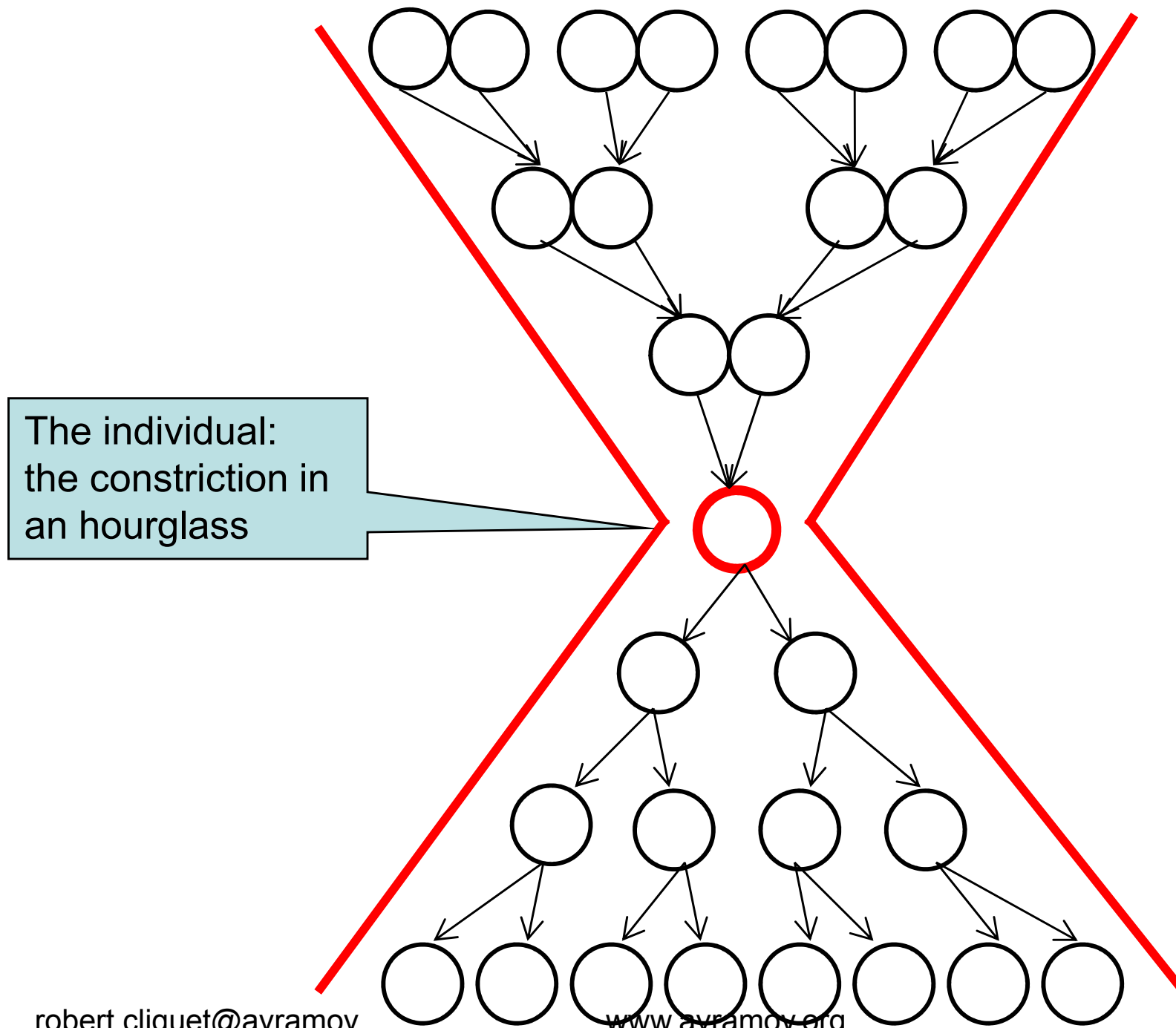
Next generations are characterized by an identical **multiplicative dilution**:

with an average fertility of two children the genes of an individual will successively be distributed over **2, 4, 8, etc.** descendants.

The genetic relation between individual and population

- An individual can genetically be represented as the **constriction** of an hourglass;
- An individual is genetically a **temporary condensation** of genetic material that was, before a few generations, **spread** over nearly the total reproductive community from which it emerged, and will, within a few generations, again be **diluted** over the total population within which the genes are recombined.

The genetic relationship between individual and population



The individual:
the constriction in
an hourglass

The genetic relationship between individual and population

- At the **individual** level genes are present:
 - among individuals;
 - among their direct ancestors (parents (1/2), grandparents (1/4));
 - among their collateral relatives (brothers and sisters (1/2), cousins (1/8), uncles and aunts (1/8), second couplings (1/16), etc.);
 - among the rest of the population.
- At the **population** level genes are present with their frequencies (e.g. p_A and q_a).

Evolution at individual and population level

➤ Individuals:

- genetically unalterable and limited in life span, i.e. mortal;
- genetically, **the individual cannot evolve.**

➤ Populations:

- genetically changeable; theoretically they are immortal ;
- genetic adaptations to changing living conditions – i.e. **evolution** – can only occur at an organization level that transcends in a double way the individual and intra-generational level, i.e. **the population and the inter-generational levels.**

The genetic importance of individuals and populations

- Individuals:
 - the **temporary and largely accidental** combination of genetic material of a reproductive community;
 - but they are the **vehicles** for intergenerational replacement at the population level which has to go through the constriction of the individuals' hourglasses.
- Populations:
 - Are intergenerationally the **permanent** entities that can **evolve**.
- **Conclusion:** the genetic interrelationship between individual and population clearly refutes both the **ideological extreme positions** on their respective priority.

Individual competition versus social cooperation

- **Individual competition**: ontogenetic development and intergenerational reproduction force the individual to be equipped with genes that must result in strong drives for self-oriented behaviour, for **selfishness**.
- **Social cooperation**: human species emerged and evolved as a social species and needs also to be equipped with strong drives towards social behaviour, towards **altruism**.
- Hence, a famous **paradox** in the Darwinian evolution theory: how to **reconcile** competition and cooperation?

The second Darwinian revolution

- Sociobiology discovered in the second half of the former century **evolutionary mechanisms** which explain the transmission of altruistic behaviour, and hence the evolutionary basis of social co-operation:
 - **Inclusive fitness theory** (Hamilton, W.D., 1964, The Genetical Evolution of Social Behaviour, I & II. *Journal of Theoretical Biology*, 7: 1-52);
 - **Reciprocity theory** (Trivers, R.L. ,1971, The Evolution of Reciprocal Altruism. *Quarterly Review of Biology*, 46, 1: 35-57).

Inclusive fitness theory

- = the degree to which genes are transferred to the next generation thanks to the ordinary reproductive fitness of an individual and the fitness of his relatives which is the result of his altruistic behaviour
- = the sum of the direct and indirect **fitness** effects of an individual's behaviours:
 - the **direct fitness** effect is the impact on the individual's fitness
 - the **indirect fitness** effect is the impact on the fitness of its social partners, weighted by the **degree of relatedness** between the individual and its social partners

Reciprocity theory

= responding to a positive action with another positive action, and responding to a negative action with another negative one

.....

Trivers (1971):

‘**The Evolution of Reciprocal Altruism**’

= an evolutionary model explaining the occurrence of altruistic behaviour between **non-relatives**, thus extending the evolutionary theory on altruism from kin to non-kin.

A gene for altruistic behaviour?

- There is **no gene** for altruistic behaviour!
- Complex behavioural characteristics are usually influenced by **several allele pairs** producing behaviour control mechanisms which, in interaction with **environmental influences**, and not the least socializing learning processes, can in particular circumstances result in altruistic behaviour.

How is group co-operation to be reconciled with the competitive self-interests of individuals?

- In particular conditions of in-group or out-group threats, the development of social life appears to favour **individual survival**, and, hence, the transmission of genes;
- Social co-operation, without excluding moderate forms of individual competition, fulfils the same functions as competition, - in present-day sociobiological terminology: the **maximization of the inclusive fitness of the individual**.

Redefining altruism

- Evolutionarily selected altruistic behaviour is, in its ultimate effects, to be equated with genetically selfish behaviour:

"Such altruism ... may be described as phenotypically (or self-) sacrificing but genotypically selfish" (Alexander, 1979).

- **'Genuine altruism'**: helping behaviour that decreases the inclusive fitness of the altruist and increases that of the beneficiary (Lopreato, 1981).

Altruism in EEA

- The altruistic drives of the human are a very early hominid adaptation in the 'environment of evolutionary adaptedness (EEA).
- It was an adaptation for living in small groups in which people were **genetically closely related** and where people also had the opportunity to **get acquainted** with all of the group members.

Altruism in modern society

- Size of modern societies: **many millions** of individuals;
- = novelty to which **not yet adapted** genetically;
- → face many **bio-social** constraints and conflicts regarding the competition-cooperation dynamics;
- necessity to induce **co-operate behaviour** between huge numbers of people with whom they have no close genetic relatedness, and whom they mostly don't know very well;
- finding the **right balance** between co-operation and competition is or should be one of the main endeavours of modern societies.

Nepotism in modern society

- Nepotism = **favoritism** towards relatives;
- In EEA: nepotism = **well adapted** evolved psychological mechanism;
- In modern society: maladaptive trait!
- Modern culture can only remain innovative by assigning responsible functions on the basis of **individual qualifications** and not on the basis of descent, favoritism towards relatives;
- However, the nepotistic drive is so strong that it transcends even genetic groupism, and manifests itself also in **culturally defined group formation** (e.g. in ideological (religious) denominations and political parties);
- Conclusion: nepotism requires a **firm rejection** in our values systems and **strong ruling** in all kinds of job assignment procedures to avoid or limit it.

Individualism in modern society

- Individualism is a term used to describe a moral, political, or social outlook that stresses **human independence** and the importance of **individual self-reliance and liberty**;
- Individualism is therefore opposed to ideologies which stress that **communal, group, societal, racial, national, or global goals** should take priority over individual goals.

Individualism: several moral meanings

- **France:** originally largely an unfavourable connotation, i.e. it was largely equated to **egoism and selfishness**;
- **Germany:** the term '**individualismus**' became soon synonymous with individuality (*'individualität'*), the notion of individual uniqueness, originality, and **self-realization**;
- **United States:** the concept of individualism itself became associated to **very positive moral qualities** such as self-determination, self-reliance and fully development

Individualism: currently

- Continues to evoke, also within many cultures, ethically **different evaluations** and appreciations:
 - continues to be assimilated to **negatively valued attitudes** and behavioural patterns, such as selfishness and egoism;
 - valued in a **very positive way** and stands for highly esteemed moral values such as individual self-development and self-fulfilment.
- Quite striking is the **sizeable sociological, political and philosophical literature** on individualism that continues to appear in the major languages in the West

Individualism: secular trends

- Modern culture is characterized by a **gradual increase** in individualistic attitudes and behaviour:
 - Different domains of life show an increasing tendency for individuals to **concentrate on themselves**, to withdraw from social groups, institutions, anything outside themselves;
 - Particularly striking on the changes in **family values, family relations and structures**.

Individualism: push factors

- Many factors in modern societies **allow for or even push** towards individualism:
 - technological innovation;
 - mobility;
 - affluence;
 - social security;
 - independent jobs;
 - exposure to media;
 - one child family;
 - open frontiers;
 - increasing economic competition;
 - the collapse of the communist regimes;
 - globalization.

Individualism: side effects

- Current jubilant mood in some quarters about the **benefits** of the increasing economic competition in the post-communist, neo-liberal era may prove to be strongly **premature**;
- Unlimited competition is **unsustainable** because of many unfavourable individual and social side effects, e.g.
 - increasing stress levels on health,
 - stronger social strife and conflicts;
 - increase of social excluded groups (less intelligent, energetic, educated);
 - further environmental decay;
 - subreplacement fertility
 - dysgenic developments.

Individualism versus individuality

- Modern culture enhanced considerably the **opportunities** for individual emancipation and self-actualisation, a.o. resulting in higher physical and mental performances;
- Created the **subjective feeling** of an increased individual independence and boundlessness;
- However, increased opportunities for individual emancipation are due to higher levels of **socialisation and cooperation**;
- The goal for more individuality is apparently being **confused** with the drive for more individualism.

Individualism: inadapative

- Modern culture allows for the development of individualistic derailments which, in the long run, will prove to be **unsustainable and inadapative**;
- Free-riding, in whatever domain of society – social welfare abuse, stock exchange speculation, delinquency, environmental pollution, machismo, military aggression, to name only a few – is **incompatible** with the knowledge modern science has acquired about the subtle interrelationships between individual and societal needs .

By way of conclusion:

- Individual **variation** is, within certain limits, positively to be evaluated:
 - Short term: less boring, need for variety of talents;
 - Long term: guarantee for future adaptation to changing environmental conditions;
- **Individuality**, not individualism is to be promoted;
- Leigh's (1990) conclusion on individual-societal **interdependency**:

*“Human intelligence has yet to design a society where **free competition** among the members works for the **good of the whole.**”*