

# CHALLENGES!

**... TO THE BASIS OF GIFTEDNESS AND TALENT EDUCATION**



JÖNKÖPING UNIVERSITY  
*School of Education and  
Communication*

25th Anniversary Conference 28 June 2019, Vrsac, Serbia

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# Disagreements on what giftedness and talent is and does

All of these labels and fields have different vested interests in extreme ability, and with vested interests follow different understandings, practices and objectives

- Talented
  - Gifted
  - Highly able
  - Excellent
  - Competent
  - Eminent
  - Genius
  - Expertise
  - Elite
  - High-achiever
  - Prodigious
  - A-player
  - High-potential
  - Cash cow
  - Creative
- Psychology: Psychometric theory  
Psychology: Cognitive expertise  
Education: Social constructivist theory  
Management: Economic theories (Human capital)  
Management: Leadership theories

# The Talent Confusion Matrix

STAKEHOLDER	COMMON LABEL	ASSUMED INCIDENCE	KEY QUESTION
<b>Business world (Leadership)</b>	Talent	Few	What can they do?
<b>Business world (Production)</b>	Talent	Everyone	What can they do?
<b>Society in general</b>	Talent/Giftedness	Few	How much do I like what they do?
<b>Sports</b>	Talent	Few	How fast, how strong, how high, how many goals and so on?
<b>Art and music</b>	Talent/Giftedness	Few	How great the experience?
<b>Politics</b>	Talent/High achievement	Everyone	How does it fit current ideology?
<b>Academic (Psychometrics)</b>	Giftedness	Few	Can it be identified according to valid measures?
<b>Academic (Behaviorism)</b>	Talent/Expertise/ Excellence	Everyone	Is support excellent and do they practice deliberately or not?

Persson, R. S. (2014). The Needs of the highly able and the needs of society: A multidisciplinary analysis of talent differentiation and its significance to gifted education and issues of societal inequality. *Roeper Review*. 36, 1-17

# Why is there such confusion and no agreement?

## The simple answer is ideology

Society has expectations on what talent could achieve or, indeed, should achieve, for example

- They will generate lots of profit and generally present competitive markets with an edge (Business and politics)
- Their leadership will resolve the problems of the world (Politics and some academics since 1990)
- Altruism: they must develop for their own sake and according to interest (Most academics and teachers prior to 1990)
- They will provide an edge in conquest and dominance (Russia, China and the USA and others)

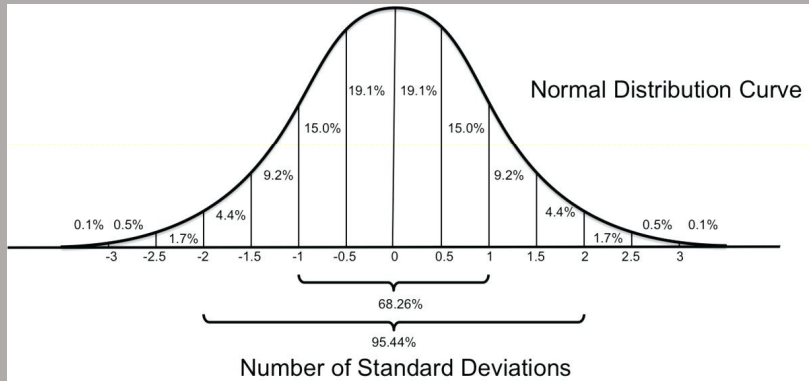
...and why cannot scholars ever agree?



**They have no common foundation  
for understanding or practice!**

However, this is **NOT** because one is not available! The one available, however, is inconvenient, often politically incorrect and rarely in agreement with business and industry management

**...Few politicians would publicly admit that not all are same**



**Yet, our universe, it would seem, is more or less ruled by chance through Normal Distribution!**

Normal distribution is probably the greatest challenge to any Western ideologist since it constitutes evidence of the fact that we are not all equal irrespective of policy and expectation

A democracy must reasonably be a social system designed to protect the rights of everyone, **not** to generate policies assuming everyone is exactly the same, forcing them to be all the same by legislation which is not unheard of in Western political systems

## ...The evidence are overwhelming!



The classical problem of whether we develop by **nature or nurture** has been resolved for about 20 years! It is neither nature nor nurture – we inevitably develop by both because of how all organisms evolve through history

- Genes are responsibility for about half of all sports achievement in any population
- Genes are also responsible for how well someone is able to train or practice
- Personal characteristics are genetically determined by 30-60%
- Intelligence (IQ) is 53% genetically determined
- Creativity, however defined, is also influenced by genetics (by 50%)
- Mathematical ability is also influenced by genetics (by 50%)
- Top achievements in core curricular subjects in school are also determined by genetics (by 58%)
- The Swedish Agency for Schools argue contrary to available scientific evidence: Inherited ability is not particularly important for top achievement in schools



### Example references:

Plomin, R. (2018). *Blueprint: How DNA makes us who we are*. London: Allen Lane.

Shakeshaft NG, Trzaskowski M, McMillan A, Rimfeld K, Krapohl E, et al. (2013) Strong Genetic Influence on a UK Nationwide Test of Educational Achievement at the End of Compulsory Education at Age 16. *PLoS ONE* 8(12): e80341. doi:10.1371/journal.pone.0080341

Skolverket (2012:379). *Högpresterande elever, höga prestationer och undervisningen*. Stockholm: Fritzes

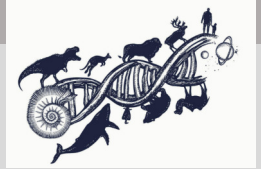
# The Challenge!

... to every Giftedness and Talent Scholar and Practitioner



# The Challenge!

... is to accept and operationalise the dynamics of human evolution as the basis for all human behaviour



There is a considerable need to understand giftedness and talent as an **adaptive** behaviour and on the basis of human evolution and universal behaviour. There are currently a little more than **400** such behaviours known to date



## Social evolution generates cultural universals

... these are a few human behaviours existing in every culture through known human history

Social context and the geophysical environment determine what is positive or negative behaviour as well as what can be shown in public or what must be socially suppressed and banned

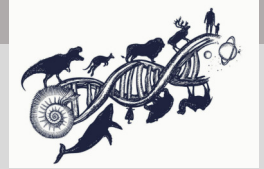
- To be social and group-oriented
- Have a self-interest
- Be sexual
- Prefer relatives (nepotism)
- Be altruistic
- Be competitive
- Parenting specific to the human species
- The importance of assigned gender
- To seek power and influence among others
- Divination and fortune-telling
- Poetry
- To be aware of social status
- To co-operate
- Ability to complex learning
- Group-identification
- Engage in conflict and aggression
- To be spiritual and philosophical
- To maintain a positive outlook on life
- To be convinced of a just and fair world
- Fear of strangers
- Aesthetics
- Rituals

Brown, D. E. (1991). *Human universals*. New York: McGraw-Hill.

Persson, R. S. (2016). Human Nature: The unpredictable variable in engineering the future. In D. Ambrose & R. J. Sternberg (Eds.), *Creative intelligence in the 21<sup>st</sup> Century. Grappling with enormous problems and huge opportunities*. Rotterdam, NL: Sense Publishers.

Pinker, S. (2002). *The blank slate: The modern denial of human nature*. New York: Penguin.

# The unanswered question



... if a basis for consensus is available why, then, have scholars and practitioners ignored it for so long?!

**ISOLATIONISM** (Lacking the necessary knowledge)

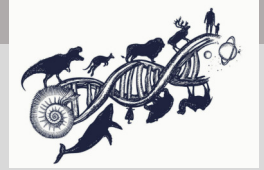
**DOGMATISM** (No desire to change in any way since change means risking status, influence and perhaps identity)

**SOCIO-CULTURAL BIAS** (Ethnocentrism: our understanding is the best and it is applicable everywhere else too)

**SOCIO-COGNITIVE BIAS** (A human proclivity to avoid negative understanding and consequence in favour of positive ones irrespective of fact and truth)

**SOCIAL STRATEGY** (The main motivation for scholarship is power and influence. Every decision or choice made relates to further one's career and status)

# Consilience

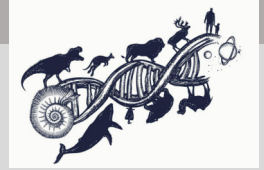


## **ISOLATIONISM** (Lacking the necessary knowledge)

In a sense most of the Social Sciences including, of course, education and psychology, are isolationists in the sense that they tend to be out of touch with what other disciplines are doing. For an understanding of human behaviour it is particularly detrimental to NOT keep up with how biology, physiology, genetics, epigenetics, anthropology, zoology, medicine and how evolution has been studied—and consistently confirmed—and the relevance of this for gifted and talented behaviour.

We cannot escape the fact that Homo Sapiens is an evolving species. If this is not part of our understanding of human behaviour our knowledge is very limited and sometimes even completely wrong!

# Consilience



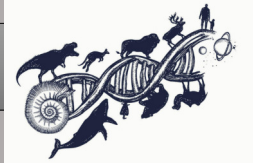
There is good reason for Harvard University's Stephen Pinker (2002) to exclaim that

“the refusal to acknowledge human nature is like the Victorians’ embarrassment about sex, only worse: it distorts our science and scholarship, our public discourse, and our day-to-day lives ... The dogma that human nature does not exist, in the face of evidence from science and common sense that it does, is ... a corrupting influence” (p. ix).

**Anyone making an effort to research or teach Homo Sapiens must consider **CONSILIENCE**; that is, learn from all relevant research disciplines about a common phenomenon or problem. Nature is not a puzzle of different pieces, it is a dynamic whole (Wilson, 1998).**

Pinker, S. (2002). *The blank slate. The modern denial of human nature*. London: Penguin Books.  
Wilson, E. O. (1998). *Consilience. The unity of knowledge*. London: Abacus.

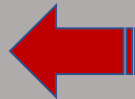
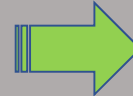
# Science evolution: Consilience is only developing in one direction!



## The Natural Sciences

- Biology
- Mathematics
- Physics
- Genetics
- Anthropology
- Chemistry

Increasingly understanding the social world of Homo Sapiens

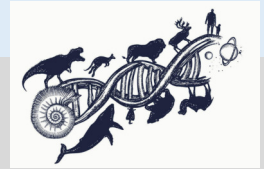


Reluctant to understand or even accept the physical and biological world and its inevitable impact on Homo Sapiens

## The Social Sciences

- Psychology
- Education
- Political science
- Sociology
- Gender studies
- Management

# Consilience



A few examples of where mainstream research of giftedness and talent is **very** likely to be **very** wrong: ASSUMPTIONS

- ✓ Gifted behaviour presents almost infinite promise and potential for everyone to benefit
- ✓ The gifted and talented will resolve the world's problems and make the world a better place.
- ✓ The gifted must be trained to lead, take charge and to be our wise, democratic and compassionate leaders
- ✓ The gifted and talented should engage in politics to improve our societies
- ✓ With social support, good instruction and 10 years of deliberately practice anyone can become a talent and offer their expertise to the world

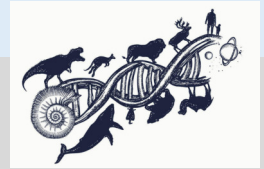
Persson, R. S. (2015). Through the looking-glass: understanding the social dynamics of human nature and gifted identity. In R. Klingner (Ed.), *Make them shine: identification and understanding of gifted children under consideration of their social and emotional needs* (pp. 37-76). Zürich, CH: LIT Verlag.

Persson, R. S. (2017). Accountable talent: Under and overachievement as investible human capital. In R. Klingner (Ed.), *Gifted underachiever* (pp. 1-32). New York: NOVA Science Publishers.

Persson, R. S. (2018). *Evolved human giftedness: reclaiming science from ideology, dogmatism, and self-serving bias*. Ulm, DE: ICIE.

Persson, R. S. (2019). Destined to lead the World? On great leaders, fashionable nonsense, and the origins and possible future of leadership. In R. Klingner (Ed.), *Gifted leadership* (pp. 1-48), New York: Nova Science Publishers.

# Consilience



A few examples of where mainstream research of giftedness and talent is **very** likely to be **very** wrong: REALITY

- ✓ Gifted behaviour is extreme behaviour and is therefore **by default** socially dysfunctional
- ✓ The gifted and talented are more able than most others to resolve a number of the world's problems. However, it is extremely unlikely that they will be allowed to by the social context of which they are part
- ✓ There will never be a truly gifted compassionate and democratic leader on the world stage nor in any organisation with more than about 150 employees
- ✓ It is highly unlikely that any politician will ever be gifted because of the prerequisites of political success and the characteristics of the gifted
- ✓ Giftedness is a rare human phenomenon and it is genetically impossible to deliberately practice and support someone to become 'gifted'—unless their DNA is manipulated and normal distribution is rendered useless!

Persson, R. S. (2015). Through the looking-glass: understanding the social dynamics of human nature and gifted identity. In R. Klingner (Ed.), *Make them shine: identification and understanding of gifted children under consideration of their social and emotional needs* (pp. 37-76). Zürich, CH: LIT Verlag.

Persson, R. S. (2017). Accountable talent: Under and overachievement as investible human capital. In R. Klingner (Ed.), *Gifted underachiever* (pp. 1-32). New York: NOVA Science Publishers.

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# Yet, this is the European political perspective ...



*The Budapest Declaration of Talent Support from 2011* is an interesting example of how the social and emotional needs of the gifted for their own sake are de-emphasized in favour of a more business-oriented use of the term talent. Talent is expressed as a commodity and societal production needs are made a priority:

Although we acknowledge there are different terminologies and definitions related to talent development, we seek a broader consensus. **Everyone may be able—at something.**

. . . Talented people are able to perform at a high level in any walk of life. . . . **To find gifted people and develop their talents is in the direct interest of any nation and of Europe as a whole. . . . Talent support is the common interest, common task, and common responsibility of governments, local communities, businesses and nongovernmental organizations.**

Hungarian EU Presidential Conference on Talent Support and First European Talent Day. (2011). *Budapest declaration on talent support*. Retrieved from <http://www.conference2011.talenteday.eu/en/>



... and this is why the world economy craves talent



## **Top talent produces a disproportionately large amount of output!**

O'Boyle and Aguinis (2012) collected data—including 198 samples of 633,263 athletes (e.g., professional and collegiate basketball players, soccer players), entertainers (e.g., writers, movie stars), politicians (e.g., elected officials in state and national legislatures around the world), and researchers in more than 50 scientific fields to demonstrate who in a group is the most productive or achieves the best. They found that

**most performance outcomes are attributable to a small group of elite performers.**

**To put this in greater perspective, results indicated that 65.8% to 83.3% of performers fell below the mean level of performance and that 10% and 26% of productivity came from the top 1% and 5% of workers, respectively.**

Knowing that the majority of workers fall below the mean in terms of performance, and that top performers are responsible for such a large portion of productivity, we can better understand the necessity of finding and retaining top talent.

O'Boyle, E., & Aguinis, H. (2012). The best and the rest: Revisiting the norm of normality of individual performance. *Personnel Psychology*, 65(1), 79—119.

... and according to existing giftedness research a 'gifted leader' is apparently only American. Few, if any, are considering cultural differences



### The American Superhero

- Fight for noble personal and societal goals
- Be strong, fast, brave and nimble
- Leverage cutting-edge technology and physical resources
- Creatively develop and exploit unique advantage
- Be self-reliant yet compassionate
- Manage reputation and image
- Self-reflect on identity and purpose



### The Swedish Equal Among Equals

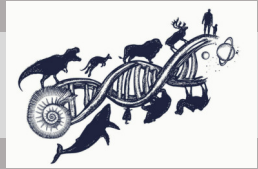
- Knowledge, common sense and action
- Collaboration, consensus and avoiding conflict
- Empowering, independence and control
- Universalism, fairness and pragmatism
- Walking, talking and silence



### The Iranian Teacher of Wisdom

- Loyalty
- Fairness and pursuit of justice
- Kindness to all, especially the poor and weak
- Moderation
- Courage and chivalry
- Forgiveness
- Seeking knowledge and wisdom
- Patriotism

# The unavoidable basis for all human behaviour



The **acceptance** and knowledge of human behaviour **as a result of phylogenetic evolution**

... and as a result pursuing all study of and application in gifted education on the principles of **FUNCTION** and **ADAPTATION**; that is ...

- ALL social behaviour has a function or purpose serving the survival of the species
- ALL human behaviour is therefore subject to adaptation both over longer periods of time as well as over shorter periods of time due to epigenetics
- In consequence, gifted and talented behaviour, *irrespective* of theory, ideology and culture, **must** also be understood on the basis of function and adaptation

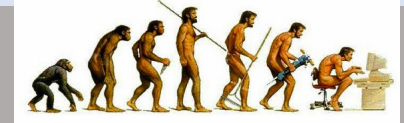
Examples of references:

Székely, T., Moore, A. J. & Komdeur, J. (2010). *Social behaviour: genes, ecology and evolution*. Cambridge, UK: Cambridge University Press.

Sapolsky, R. (2017). *Behave: The biology of humans at our best and worst*. London: Bodley Head.

Sumpter, D. J. T. (2010). *Collective animal behaviour*. Princeton, NJ: Princeton University Press.

# A taxonomy of human behavioural social functions in reference to ability

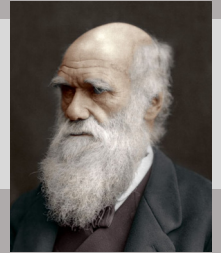


SOCIAL FUNCTION	TERM	UNIVERSAL SOCIAL RESPONSE
Maintenance	'The Nerd'	Acceptance and encouragement
Entertainment	'The Hero'	Acceptance and encouragement
Societal change	'The Martyr'	Suspicion, resistance and persecution

Persson, R. S. (2009). The unwanted gifted and talented. A sociobiological perspective of the social functions of giftedness. (pp. 913-924). In L. V. Shavinina (ed.), *International handbook of giftedness*. Dordrecht, NL: Springer-Science.

# What is evolution?

...a very very brief overview of main principles



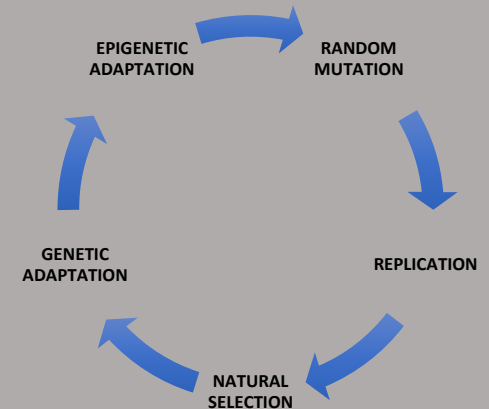
**MUTATION:** In any given population DNA-mutations will occur at random

**REPLICATION:** These mutations will replicate into the next generation

**NATURAL SELECTION:** Only mutations which somehow will be over survival value in a certain environment will be 'selected' and transmitted further

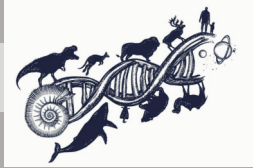
**GENETIC ADAPTATION:** The selection of traits, physiological and behavioural, over long periods of time makes any species adapt to their specific habitat

**EPIGENETIC ADAPTATION:** Not all selected physiological and behavioural traits are passive over a life span. Adaptation to the necessities of survival continues and will affect and change our behaviour



Griffiths, A. J. F., Wessler, S. R., Carroll, S. B., & Doebley, J. (2012). *Introduction to genetic analysis* (International edition). New York: W. H. Freeman and Company.  
Plomin, R., DeFries, J. D., Craig, I. W., & McGuffin, P. (Eds.). (2003). *Behavioral genetics in the postgenomic era*. Washington, D. C.: American Psychological Association.

## Evolutionary impact on giftedness research and practice: a few examples



Understanding gifted and talented behaviour on the basis of evolutionary dynamics will change research into giftedness and talent considerably and for these reasons:

- ✓ 1. HUMAN NATURE—the characteristics making us adaptive and oriented towards survival of the species—has been entirely **ignored** by giftedness and talent scholars.

Human Nature is defined as all aspects of human behaviour, culture-specific and universal, serving the purpose of evolutionary adaptation for inclusive fitness by developing specific functions in, and triggered by, a social context (Tooby & Cosmides, 1989).

- ✓ 2. The behaviour prompted by human nature is largely **unaware**, making it difficult to study at an individual level, since we do not really know what we are doing and why at all times. Such behaviour can only be studied in a very large population

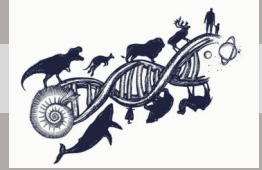
Interestingly such large-scale human behaviour patterns is rarely studied by psychologists but rather by mathematicians, physicists and the 'tech giants' like Google and Facebook entirely for commercial purposes (O'Neil, 2017; West, 2018)

O'Neil, C. (2016). *Weapons of math destruction: how big data increases inequality and threatens democracy*. London: Allen Lane.

Tooby, J., & Cosmides, L. (1990). The past explains the present: emotional adaptations and the structure of ancestral environments. *Ethology and Sociobiology*, 11, 375-424.

West, G. (2018). *Scale: the universal laws of growth, innovation, sustainability, and the pace of life in organisms, cities, economies, and companies*. New York: Penguin Press.

## Evolutionary impact on giftedness research and practice: a few examples



- ✓ 3. Some behaviours are more **prone to change by adaptation** than others, but the result is that characteristics typical of someone today need not be the same in the future if circumstances change. This is particularly true of 'personality'

It is no longer true that personality consists of largely stable characteristics over an entire life-span. It will only make sense to consider, for example, The Big Five Dimensions of openness to experience, conscientiousness, extraversion, agreeableness and neuroticism on a population level, *not* on an individual level (see Persson, 2019). Personality, like other behaviours are *adaptive* through epigenetics.

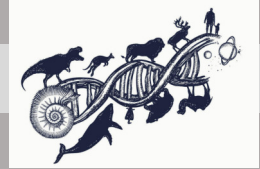
- ✓ 4. Evolution towards fitness by natural selection **is largely random**

Making predictions of human behaviour by statistical means is therefore difficult suggesting that the use of psychometric instruments in studying human behaviour might be unreliable at best! (Losos, 2018)

Losos, J. (2017). *Improbable destinies: how predictable is evolution?* London: Allen Lane.

Persson, R. S. (2019). Recruitment mistakes, future employees, and fabulous fantasies: the market's needs for magical qualities. In H. Ahl, I. Bergmo-Prvulovic & K. Kilhammar (Eds.), *Human resource management: A Nordic perspective* (pp. 86-102). London: Routledge.

## Evolutionary impact on giftedness research and practice: a few examples



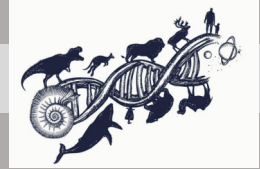
- ✓ 5. In evolution individuals are only of interest if they carry a mutation which by natural selection creates fitness for every member of any species. The process is always driven towards the average majority! In evolution **AVERAGE IS THE OBJECTIVE.**

There is a reason most people can be placed in the middle of normal distribution (about 70%). In this light, it is easy to understand why extreme behaviour becomes dysfunctional unless it somehow serves social cohesion of the 70% in a way that does not present a threat (e.g., Wilkinson & Pickett, 2010).

- ✓ 6. There is no such thing as 'gifted leadership'. Leadership is adaptive behaviour too and **is a largely random occurrence emerging in a group when needed**

There is formal leadership by training, but this is **NOT** related to adaptive and species-typical leadership. In larger groups than about 150 individuals formal leadership is likely to **change an individual's characteristics toward sociopathic and narcissistic traits** since perceived status prompts physiological changes in turn changing perception and self-understanding for evolutionary reasons (Persson, 2019; Robertson, 2012; Ronay & von Hippel, 2010).

## Evolutionary impact on giftedness research and practice: a few examples



- ✓ 7. **Competition as a means to develop or identify gifted and talent individuals is largely bad idea**, particularly if allowing an individual competing with other individuals. The problem is valid for both men and women, boys and girls.

Competition—like leadership ambition—prompts personality changes due to the evolutionary function of competitiveness re. Relying on testosterone and cortisol hormones in both genders, but it is more pronounced in men. In addition, with the rising testosterone levels required for one-to-one competition **risk-taking increases considerably and a reliance on facts and reason weakens in equal amounts** (Cheng *et al.*, 2018; Persson, in production; Robertson, 2012; Smith & Trope, 2006)

Cheng, J. T., Kornienko, O., Granger, D. A. (2018). Prestige in a large-scale social group predicts longitudinal changes in testosterone. *Journal of Personality and Social Psychology*, 114(6), 924-944.

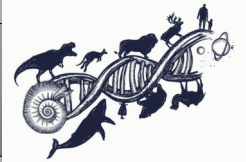
Persson, R. S. (in production). *Human ambition: The uses and abuses of competition*. Ulm, DE: ICIE

Robertson, I. (2012). *The winner effect. How power affects your brain*. London: Bloomsbury.

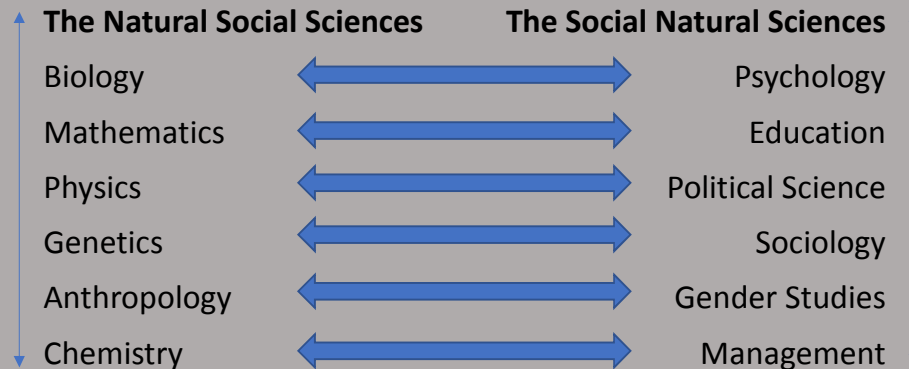
Smith, P. K., & Trope, Y. (2006). You focus on the forest when you are in charge of the trees: power priming and abstract information processing. *Journal of Social Psychology and Social Psychology*, 90(4), 578-596.

# What all social sciences must do!

...and scholars and practitioners of giftedness, talent and its education in particular



**The only allegiance a scholar can have is science and knowledge, never a discipline or an identity named or framed by a group, a discipline or an ideology. All knowledge must co-operate!**



# What all social sciences must do!

...and scholars and practitioners of giftedness, talent and its education in particular



German sociology scholar Max Weber (as quoted by Adler-Karlsson, 1997; p. 17; translated from Swedish) had this to say in the early 1900s, is now more important than ever:

**We must forcefully oppose the idea that you can be scientifically content with a broadly accepted and conventional values that everyone takes for granted. The task of Science, it seems to me, is the exact opposite, namely to question that which convention holds as obvious**