Gunnar Heinsohn (October 2021)

AMERICA'S BRAINPOWER

A Democrat in the White house is expected to focus on two core projects: (1) He is to keep the earth as cold as possible (https://www.bbc.com/news/science-environment-54858638) and (2) he is to remove legal barriers for migrants on the nation's southern border (https://www.migrationpolicy.org/). The first project is particularly popular in Canada and Western Europe.

MATHEMATICAL LOW ACHIEVERS PER 1,000 15-YEAR-OLDS (*levels 1 and 0* in PISA 2018)
in the world's 72 economically leading nations with more than one million inhabitants.
(Data: https://www.oecd-ilibrary.org/docserver/79c489df-en.pdf?expires=1604694280&id=id&accname=guest&checksum=7873D34C9E70474BD3C2FC3A387E95B7.)

20-144/1,000 15-year-olds	145-159/1,000 15-year-olds	160-199/1,000 15-year-olds	200-249/1,000 15-year-olds	250-369/1,000 15-year-olds	370-519/1,000 15-year-olds	520-650/1,000 15-year-olds	651-920/1,000 15-year-olds
China (24)	Poland (147)	Canada (163)	Czech R. (204)	Slovakia (251)	Serbia (397)	Thailand (527)	Colombia (654)
[4 select provinces]	Denmark (148)	Slovenia (165)	Austria (211)	Hungary. (257)	Malaysia (415)	Qatar (537)	Brazil (681)
Macao (50)	Finland (149)	Switzerland (168)	Germany (211)	Lithuania (257)	Albania (424)	Mexico (563)	Argentina (690)
Singapore (71)	S-Korea (150)	Latvia (173)	France (212)	USA (271)	U. Arab E. (453)	Bos+Herz (576)	S-Arabia (697)
Hongkong (92)	Ireland (157)	Sweden (188)	Russia (217)	Belarus (294)	Romania (465)	Jordan (593)	Indonesia (719)
Estonia (102)	Netherl. (157)	Norway (189)	N-Zealand (218)	Croatia (312)	Kazakhst. (491)	Lebanon (598)	Morocco (756)
Japan (115)	Vietnam (157)	U-Kingdom (192)	Australia (224)	Greece (358)	Moldova (503)	Costa Rica (600)	Kosovo (766)
Taiwan (140)		Belgium (197)	Portugal (233)	Ukraine (359)	Uruguay (507)	Peru (603)	Philippin. (807)
			Italy (239)	Turkey (367)	Azerbaijan (508)	Georgia (610)	Panama (812)
Gunnar Heinsohn 11/20			Israel (241)		Chile (519)	N-Maced. (610)	Dominic.R(906)
			Spain (247)				

The second goal is primarily pleasing in Latin America, where, according to Gallup (2017), some 27 percent, i.e. more than 180 of the 660 million inhabitants, want to emigrate (https://news.gallup.com/poll/245255/750-million-worldwide-migrate.aspx). It cannot be any different, because their home territories are trapped in premature de-industrialization (https://www.vox.com/a/new-economy-future/premature-deindustrialization). Their relatively basic industries are wiped out by Asian competition offering better quality for lower price. Subsequently, they are not able to switch to high-tech industries because they lack the top-skilled specialists for innovation and its implementation. In the USA, on the other hand, less well educated migrants not only from Latin America and the Caribbean but from all over the world still have access to a wide range of social programs.

Both of the American Democrats' main projects attract the highest attention from the 1.7 billion people in East Asia. For them, the earth is cool enough. And since their borders are only open to experts, they welcome America's noble admission of the downtrodden. They optimize their competitive position because America – with less than one-twentieth of the East Asian high-tech talent (table below) – ties its increasingly scarce talents to climate activities.

Both tables focus on children of 15 years or less, because they do not have to be predicted, but are already born and determine the winners or.

BRIGHTEST MATH STUDENTS PER 1,000 15-YEAR-OLDS (*Level 6* in PISA 2018) in the 72 leading nations (> 1 mill. inhabitants)

The figure below the share shows the TOTAL NUMBER OF BRIGHTEST MATH STUDENTS for all children from 0-14 in 2019, assuming that the younger ones will perform as well as the 15-year-olds of 2018.

(Data: https://www.oecd-ilibrary.org/docserver/79c489df-en.pdf?expires=1604694280&id=id&accname=guest&checksum=7873D34C9E70474BD3C2FC3A387E95B7; Population under 15: https://data.worldbank.org/indicator/SP.POP.0014.TO.)

43-170/1,000 15-year-olds	**28-42/1,000 15-year-olds**	**21-27/1,000 15-year-olds**	**14-20/1,000 15-year-olds**	**6-13/1,000 15-year-olds**	**2-5/1,000 15-year-olds**	**1/1,000 15-year-olds**	**< 1/1,000 15-year-olds**
Math aces < 15 years	***Math aces < 15 years***	***Math aces <15 years***	***Math aces <15 years***	***Math aces <15 years***	***Math aces <15 years***	***Math aces <15 years***	***Math aces < 15 years***
China [4 prov.] (**165**) ***41,000,000****	Poland (**41**) ***238,000***	N-Zealand (**27**) ***25,970***	Italy (**20**) ***158,800***	U. Arab E. (**12**) ***17,260***	Greece (**5**) ***7,450***	Bos+Herz (**1**) ***485***	Argentina ***n.a.***
Singapore (**138**) ***97,000***	Canada (**40**) ***240,000***	Sweden (**26**) ***47,100***	Finland (**18**) ***15.910***	Spain (**11**) ***75,900***	Moldova (**4**) ***1,690***	Brazil (**1**) ***44,340***	Colombia ***n.a.***
Hongkong (**95**) ***88,000***	Estonia (**37**) ***5,880***	Australia (**25**) ***122,500***	France (**18**) ***214,900***	Vietnam (**11**) ***246,400***	Romania (**4**) ***12,060***	Chile (**1**) ***3,700***	Costa Rica ***n.a.***
Macao (**77**) ***7,500***	Belgium (**32**) ***67,720***	Austria (**25**) ***31,750***	Israel (**18**) ***45,000***	Ireland (**10**) ***10,450***	Albania (**3**) ***1,490***	Georgia (**1**) ***745***	Dominican R ***n.a.***
Taiwan (**76**) ***250,000***	Czech R (**31**) ***52,080***	Portugal (**25**) ***34,000***	Lithuania (**17**) ***7,170***	Serbia (**10**) ***10,790***	Azerbaijan (**3**) ***7,050***	Jordan (**1**) ***3,900***	Indonesia ***n.a.***
S-Korea (**69**) ***455,000***	Slovenia (**31**) ***9,770***	Norway (**24**) ***22,340***	Russia (**15**) ***393,000***	Ukraine (**10**) ***70,000***	Kazakhstan (**3**) ***16,040***	N-Macedon. (**1**) ***342***	Mexico ***n.a.***
Switzerland (**49**) ***63,700***	U Kingdom (**31**) ***366,730***	Slovakia (**23**) ***19,480***	**USA** (**15**) ***915,000***	Bulgaria (**9**) ***9,220***	Lebanon (**3**) ***5,250***	Peru (**1**) ***8,210***	Kosovo ***n.a.***
Japan (**43**) ***688,000***	Germany (**28**) ***322,000***	Denmark (**21**) ***20,030***	Hungary (**14**) ***19,740***	Turkey (**9**) ***182,700***	Malaysia (**3**) ***22,710***	Uruguay (**1**) ***708***	Morocco ***n.a.***
Netherlands (**43**) ***188,250***			Latvia (**14**) ***4,370***	Croatia (**8**) ***4,740***	Thailand (**3**) ***35,140***		Panama ***n.a.***
				Qatar (**6**) ***2,310***			Philippines ***n.a.***
Gunnar Heinsohn 11/20							Saudi Arabia ***n.a.***

* If one takes a value for China of, say, 80/1000 (i.e. closer to Taiwan or Macao), the total would be only ca. ***20,000,000*** ***math aces*** younger than 15 years.

losers of tomorrow. The 15-year-old aces of 2018 will only be 47 years old in 2050. The very young ones of today will only really get going then However, since the table above transfers the performances of 2018's 15-year old to all younger children up to the newborns, it might look too optimistic for quite a few Western countries. After all, most of them have lost places rather than caught up since the start of the PISA studies in 2000. The United States has been hit hardest with a drop from 24 to 36 since 2003. Other First World countries – such as Germany and France – have, at least since the 1960s, replaced emigrated

highly qualified people by less-skilled foreigners. This cannot help but affect their future PISA ranks. Americans will probably find their loss of competence even more painful than their choice of presidents.

America's long-standing technological lead over China is mainly explained by its better protection of property and creditor-debtor contracts. If one rates the ownership culture on a scale of 1 to 4, the USA – like Germany and Japan – are at the highest level, while China and South Korea,

MATRIX OF ECONOMIC SUCCESS

COMPETENCE rules the roost over LIFE, PROPERTY, LIBERTY, and FERTILITY

Competence can barely be influenced. Fertility is a major problem for all. The remaining factors can be more easily modified. As China is trailing in them, it has reserves to be employed one day. G. Heinsohn 09/2021

Population 2021: China 1440 mill.; USA 333 mill.; Japan 126 mill.; Germany 84 mill.; S. Korea 51 mill.; POLAND 38 mill.
[https://www.worldometers.info/world-population/population-by-country/]

COMPETENCE [brightest math students per 1,000 fifteen-year-olds in **PISA 2018** lhttps://www.oecd-ilibrary.org/docserver/79c489df-en.pdf?expires =1604694280&id=id&accname=guest&checksum=7873D34C9E70474BD3C2FC3A387E95B7]	**LIFE** **Terrorist acts 2013-2017 / killed** [https://www.worlddata.info/terrorism/country-comparison.php]	**PROPERTY** [https://www.theglobaleconomy.com/rankings/herit_property_rights/] **2020**	**LIBERTY** https://recruitmentresult.com/global-democracy-index/ - **2021**	**FERTILITY** [**Children in a woman's lifetime 2021** https://worldpopulationreview.com/country-rankings/total-fertility-rate
China [4 prov.] **(165/1000)***	**Korea S. (2/0)**		**Germany (8.68)**	
Taiwan (79/1000)*	**POLAND (3/0)**		**Korea S. (8.00)**	
Korea S. (69/1000)	**Japan (10/19)**	**Japan (87)**	**Japan (7.99)**	
		Korea-S. (83)	**USA (7.96)**	
Japan (43/1000)	**Germany (131/34)**	**USA (82)**	**POLAND (6.52)**	
POLAND (41/1000)		**Germany (81)**		
		POLAND (63)		**China (1.7)**
				USA (1.7; "whites" 1.6)
Germany (28/1000)		**China (61)**		**Germany (1.6)**
		[ca. 15 in 1978]		
USA (15/1000)	**USA (189/224)**			**POLAND (1.5)**
	China (74/534)		**China (2.26)**	**Japan (1.4)**
				Korea S. (1.0)

*** Taiwan** may be more representative for **the whole of China** than its 4 **selected** provinces taking part in PISA 2018. China's lead in competence over the USA per 1,000 students is thus rather 5:1 than 11:1. Combined with China's four times larger population, this gives an **overall lead over the USA not of 44:1, but only of c. 20:1**.

with a score of 3, reach only 75 percent thereof. Nevertheless, the top nations are now operating on a level playing field. In such a situation, the nations with higher cognitive competence do not immediately, but steadily pass the lower-ranking ones. This can be seen particularly clearly in the PCT-patent applications between 1994 and 2019. Germany, with its 80 million inhabitants, turned its 22:1 lead of 1994 over 50 million South Koreans into a meagre 1:1 by 2019. The USA outperformed China by a factor of 150 in 1994, but in 2019 only came second behind the Middle Kingdom.

PCT patent applications of the global top five 1994 to 2019 (green 1st; blue 2nd; yellow 3rd. (Total population (TP), median age (MA), credit rating [Trading Economics Points])

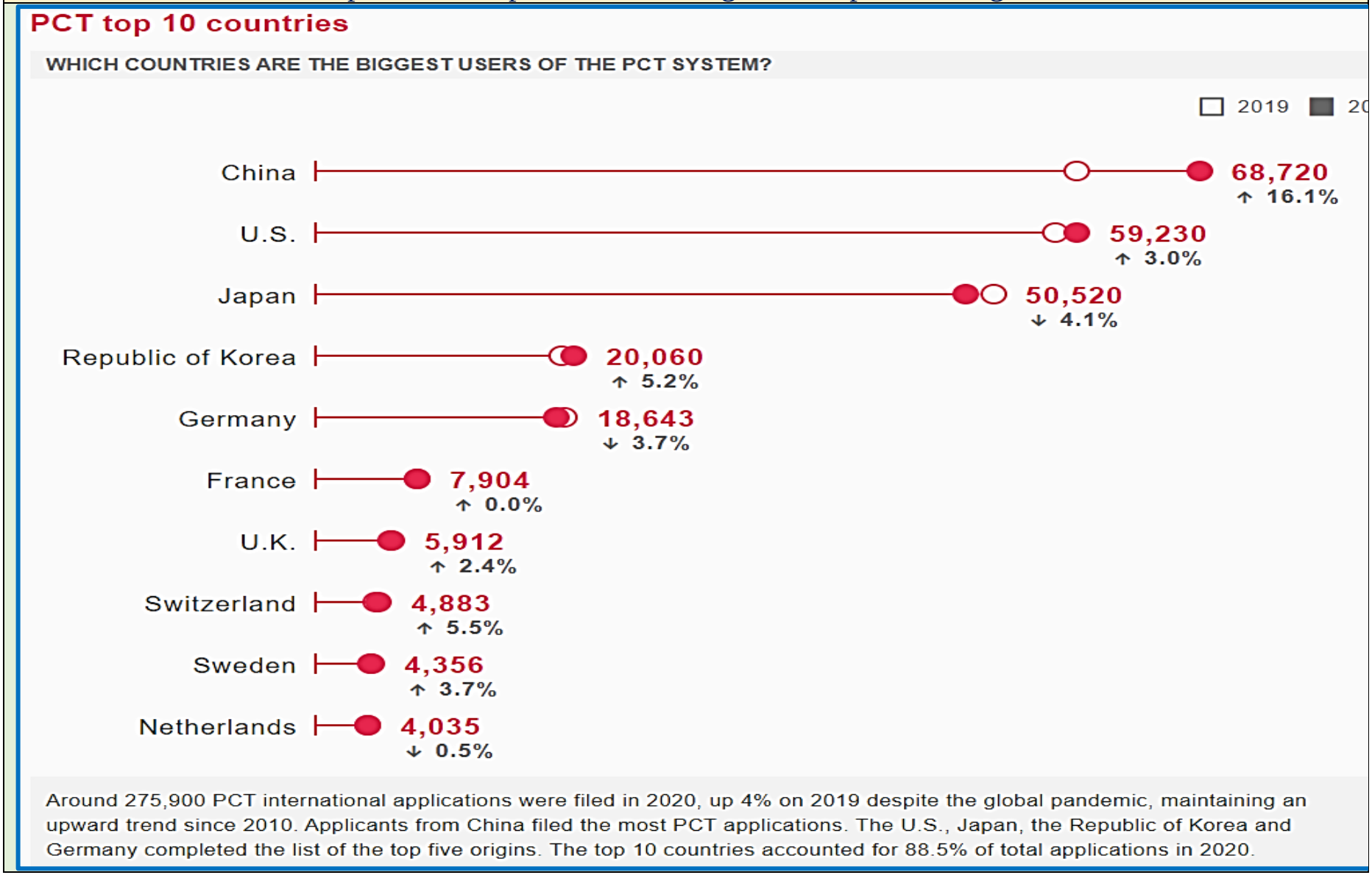
[https://www.worldometers.info/world-population/; Mai 2020]; https://tradingeconomics.com/country-list/ratinghttps://www.wipo.int/publications/en/details.jsp?id=4027&plang=EN; https://www.wipo.int/edocs/infogdocs/en/ipfactsandfigures2019/]. Gunnar Heinsohn 11-2020

Year	USA TP 331 mill. MA 38.5 [Whites 44] 98 TEP	GERMANY TP 84 mill. MA 44.5 100 TEP	JAPAN TP 127 mill. MA 48.6 77 TEP	SOUTH KOREA TP 51 mill. MA 43.2 86 TEP	CHINA TP 1440 mill. MA 38.4 80 TEP
1994	14,798	4,294 22	2,290	190 :1	98 [1st time]
1995	16,588	5,054	2,700	192	106
2000	38,171	12,039	9,402	1,514	579
2005	46,019	15,995	24,815	4,685	2,500
2010	44,890	17,558	32,180	9,668	12,295
2013	57,239	17,927	43,918	12,386	21,516
2015	57,385	18,072	44,235	14,626	29,846
2017	56,624	18,982	48,208	15,763	48,882
2019	57,840 x 3.9/25 yrs.	19,353 1 x 4.5/25 yrs.	52,660 x 23/25 yrs.	19,085 :1 x 100/25 yrs.	58,990 x 602/25 yrs.

Even the best of the West are only second rate *versus* East Asia!

PCT Patents 2019 and 2020

[https://www.wipo.int/edocs/infogdocs/en/ipfactsandfigures]



If you protect your skills by building a FORTRESS OF COMPETENCE, you may win the future.
Strong bastions attract the smartest migrants for their defense.

1000 CHILDREN 0-14 years in the WORLD of 2020 are devided into>

[https://data.worldbank.org/indicator/SP.POP.0014.TO]

40: INDIGENOUS in WESTERN NATIONS [loss of talent; low-skill migrants accepted]. [US 15; Germany 4; POLAND 3; etc.]

G. Heinsohn; Warsaw; 19-09-2021

13: WESTERN FORTRESSES OF COMPETENCE on 21 mill. km^2 [only high skill migrants accepted: AUS, CDN, CH, DK, ICELAND, N, NZ, UK].

17: Russia, Belarus, Ukraine [loss of talent; more emigration than immigration.

150: EAST ASIA [Chin/Jap/Kor/Viet; 75 % of global talent for high tech]. FORTRESSES OF COMPETENCE [only high skill migrants accepted].

20: MIGRANTS/minorities in WESTERN NATIONS [US 15; Germany 2; etc.].

760: REST OF THE WORLD [premature de-industrialization; lack of competence for switching to high tech; loss of scarce talent].

Taking low-skilled immigrants will never be help enough but sufficient to ruin a Fortresse of Competence.

DESIRE TO MOVE FROM LOW-SKILLED REGIONS INTO FORTRESSES OF COMPETENCE

(Gallup's 2017 percentages for low-skill regions).

[https://news.gallup.com/poll/245255/750-million-worldwide-migrate.aspx; https://blogs.harvard.edu/mesh/2008/03/mena_population/; https://www.worldometers.info/world-population/population-by-country/; https://newrepublic.com/article/90118/pakistan-terrorism-emigration-isi]

Area	Population 1950	Population 2020 Desire to emigrate [percentage of 2017]	Population 2050 Desire to emigrate [percentage of 2017]	Percentage of adults desiring to emigrate in 2017 (calculated for 2020 + 2050 with children)
Sub Saharan Africa	186 million	1,136 million 375 million	2,123 million 700 million	33 %
Arabs and Iran	104 million	520 million 125 million	692 million 166 million	24 %
Latin America /Caribbean	169 million	652 million 176 million	780 million 211 million	27 %
Afgh.; Bangla., Pakistan	63 million	425 million 115 million	596 million 161 million	27 % (Pakistan; Gallup 04/2011)
South Asia	493 million	1,857 million 151 million	2,382 million 190 million	8 %
Sums total	1,117 million	*4,590 million* *942 million*	*6,573 million* *1,428 million*	Heinsohn, 09-2021

What do WESTERN FORTRESSES OF COMPETENCE know and do?

Retain own talent, recruit foreign talent, keep away low achievers!

Every country has people in need who have to be financed in a dignified way by the active population. At the same time, the achievers are supposed to withstand the global competition from the model pupils of East Asia. That is why they must not be discouraged by artificially increasing the number of the helpless through immigration or otherwise.

Everyone speaks English or teaches it already in kindergarten, because it remains the world language. Where English is, at least, the language of commerce, foreign talents, who have all have learned it, apply first.

Anti-racism dominates. Those who are qualified and young enough are allowed to immigrate regardless of pigmentation or denomination. However, the border remains closed for members of the still ethnic European majority if they do not meet the achievement requirements.

Even in economic crises with increased unemployment, highly qualified people are accepted as immigrants in any quantity, because their global share is shrinking, although they supply innovations for rising out of the recession.

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Even when the economy is booming, they do not bring in unskilled workers. However, excellent students are accepted at the universities. Successful immigrants from non-competitive countries help the world by sending money to their former homelands.

Of 1,000 US-students were top achievers (SAT 700-800) in English/Reading/Writing (ERW) and Mathematics (2021 *versus* 2019)

[**US College Board 2019**; https://reports.collegeboard.org/pdf/2019-total-group-sat-suite-assessments-annual-report.pdf
US College Board 2021;https://reports.collegeboard.org/pdf/2021-total-group-sat-suite-assessments-annual-report.pdf
Ethnicity of children under 18 {*71 % not fit for military service:* https://eu.ydr.com/story/news/2019/05/14/military-service-most-young-people-dont-qualify-careers/1185816001/};
https://www.census.gov/content/dam/Census/library/publications/2020/demo/p25-1144.pdf]

G. Heinsohn; 26-09-2021	ASIAN 5.3 % of population under 18 in 2020	WHITE 49.8 % of population under 18 in 2020	HISPANIC 26 % of population under 18 in 2020	AFRICAN AMERICAN 15.2 % of population under 18 in 2020
ERW 2019	170	90	20	10
ERW 2021	200	90	30	20
MATH 2019	370	100	30	20
MATH 2021	390	90	30	20

60th Mathematical Olympiad

[London 2019]

[https://www.reddit.com/r/Sino/comments/cgi1eb/the_us_team_tied_for_first_place_with_china_at/]

But what about Linus Cooper from Australia? Doesn't he easily match the East Asians?

Prof. Dres. (emer.) Gunnar Heinsohn (*1943) taught war demography at the *NATO Defense College* (NDC) in Rome from 2011 to 2020. In 2018 he gave the keynote speech on the occasion of the 15th anniversary of NATO's war school (*Joint Warfare Center*) in Stavanger/Norway. In 2019, he published *Wettstreit um die Klugen* (Global Competition for the Smartest; Zurich: Orell&Fuessli).