## What is truly "critical?"

written by Jack Lifton | July 22, 2024

In my lifetime, I have seen many existential crises almost always created by the print media, but which, since the turn of the century, have been taken over and expanded by the broadcast and Internet media. All of these crises have in common that they expose the increasingly poor education and lack of reasoning skills not only of the now extinct journalism community but increasingly of really venal politicians catering to mindless followers who follow and talk more about "my party's doctrine (aka, beliefs)" than about "my evidence and reasoning based beliefs."

For me, the first existential crisis was in 1949 when we (myself and the other 5-12-year-old) students in elementary school (K-6) were taught to hide under our desks in mock response to "atomic bomb attacks after it had been announced that the Russians had "the BOMB." Then, to continue the theme, there was the Sputnik crisis, and the (very phony) "missile gap" followed by "We let the Russians beat us into placing a man in orbit around the earth." Then the very real "Cuban Missile Crisis," the assassinations of John F. Kennedy, Martin Luther King, and Robert F. Kennedy, the Chicago riots at the 1968 Democrat convention, "Alar," "Global Cooling," and "Star Wars." A decadelong hiatus (1989-1999) after the collapse of the Soviet Union was followed by, "Y2K," "Global Warming," the 2008 Financial Crisis' and currently, "Climate Change" and "China."

This mix of human-created and human-discovered "existential crises" has in common what William Shakespeare noted four hundred years ago: "Men at some time are masters of their fates: The fault… is not in our stars, but in ourselves…"

To paraphrase and make Shakespear's Freudian pre-modern

psychology relevant: The demand for critical minerals must be from our actual, not politically induced, demand. Lifestyle choices, not existential crises, determine their actual necessity. Any future increases in demand are driven by the expansion of our Western quality of life to more people and, most importantly, by the amount of capital, any society is willing to allocate to resource production and end-use product manufacturing of consumer devices enabled by critical minerals' forms.

I note that military spending is not the most expensive item in modern budgets; social welfare receives the most of present and future capital allocations. In fact, the military's actual critical mineral needs are trivial compared to those of consumer demand.

The future demand for alternate energy devices enabling critical minerals will first be from vehicle power trains using hybrid power systems (Thus maximizing the efficiency of both fossil fuels and battery-stored electricity) to be able to have this form of transportation be truly global thus maximizing the efficiency of the fuels to which we have access for the longest possible period of time! Second, there will be a demand for battery metals that can be used to store and moderate intermittently produced power from wind and solar in places where the expansion of or access to the larger grid is not possible economically.

And, if and only if AI (aka, increased computing power) goes global, then there will be a massive demand from server farms for rare earth permanent magnets and for battery metals for backup power systems.

The national governments of the USA, Canada, the UK, and the EU are strictly peopled by power-hungry elected officials and their

armies of bureaucrats. These people do not understand energy or mineral economics, and they have little knowledge of history. Thus, they have overseen and enabled the greatest waste of natural resources in history (World Wars pale by contrast!). First, they have prohibited the clean extraction of the critical minerals they have on their own soils in abundance. Second, they have come into total dependence on China for all of the critical minerals needed for a truly global rational energy expansion while studiously (ignorantly) ignoring the fact that this focus by China on these materials has, first and foremost, been to develop the Chinese economy.

American politicians have assumed that China would always supply America with whatever it needed due to the dominance of the US dollar in world trade.

Their sheer ignorance of the economics of deglobalization has assured that this dominance will end in our (even my) lifetimes.

Without a clear and ACTIVELY executed policy of developing a secure and sufficient critical minerals infrastructure based on a reproducible pool of talented scientists, engineers, and mineral economists, the United States, Europe, and the UK will (are already there[?]) become second world countries.

The importance of rational capital allocation requires no further emphasis.

I am a capitalist, but I believe that the accumulation of useless (not for the creation of jobs) capital must give way to the reward of accumulating capital, which is not just for wealth creation, but is mostly realized through distribution in increased wages giving wage-earners' a path to private property ownership. I guess that I'm finally a populist.