

The Significance of Progress

-Overture-

Before the 1960s, GNP and GDP were the main indicators of social development in the United States. Gradually, Americans started realizing that the elimination of poverty was also important, so they included it in their definition of social progress as well (Lyndon B. Johnson's War on Poverty is a great example of this inclusion). Two decades later, in the 1990s, the United Nations introduced the Human Development Index (HDI), which included not just economic well-being, but also factors such as health, education, and standards of living [1]. At the turn of the century, the United Nations proposed eight Millennium Development Goals, which by 2015, was estimated to have saved 21 million lives [2]. Now, the world is working towards another 17 Sustainable Development Goals, aiming to improve human life without exhausting any opportunities for future generations.

The key takeaway is that people living in this day and age have a general idea of progress; they consciously try to identify current problems and attempt to solve them, thereby creating a better world. The specific problems identified may change, and multiple attempts may be made (often simultaneously), yet that better world is still what we all strive for, and progress is what we all believe in.

However, throughout history, this was hardly always the case. There's a reason that most of the technology we own and use today was invented only in these past few decades and why our "advanced" understandings of economics, politics, and culture have been largely shaped by thinkers of these past few centuries. As will be made abundantly clear, the idea of progress may very well be considered a recent invention. Along with this invention came the discovery of ignorance, the acknowledgment that society as a whole, not just the individual, could be completely oblivious to anything. Furthermore, by analyzing the invention of progress, the discovery of ignorance, and the alliance forged through their interdependence, it becomes clear that any lessons learned can also be applied personally.

Progress and its Invention

Understanding the concept of progress and its development first requires an understanding of the two main modes of logical reasoning — deduction and induction. Deduction refers to the process where a universal truth is used to prove a more specific fact to be true or false. Hence, the effectiveness of a conclusion reached through deduction essentially relies fully on the accuracy of that universal truth, often called an assumption or premise; if the premise is faulty, then the conclusion may be as well. Induction, on the other hand, is the opposite of deduction. It serves to discover common characteristics and explanations from specific examples, working from down up to find a universal truth instead.

Therefore, deduction and induction are not separate from each other; rather, they heavily rely on each other, as they both consist of generalities as well as specifics, just in a different order; induction discovers a universal truth, which leads to the explanation of specific phenomena and the justification of certain claims, which can then be used as part of another induction process. As long as deduction and induction manage to merge together in such a loop, knowledge will be

continually discovered, as will countless small, specific, yet potentially significant facts, reflecting the progression of knowledge and all subsequently made progress. Naturally, then, the invention of progress was made possible only by the synthesis of deductive and inductive reasoning.

Yet, throughout most of history, only one of these modes of reasoning, deduction, existed. A significant part of ancient Greek philosophy, for example, is deductive reasoning; most conclusions reached relied on a fundamental, unproven assumption made before any logical reasoning was done. Later, religious doctrines also served as universal truths that guided specific actions and decisions. To most living in the modern era, many ancient philosophical and religious thoughts seem unconvincing, as a disagreement with those basic assumptions leads to an automatic disagreement with those conclusions. Even if one were to agree with those assumptions, the over-reliance on unproven premises of these conclusions makes them somewhat weak and unconvincing.

Deduction's long history means it cannot be used as a valid explanation as to why the concept of progress was only recently invented. In fact, as demonstrated through those examples, an over-emphasis on deduction over induction actually prevents progress. The insistence that pre-existing truths already existed and all that was left was to find ways to apply those truths is in fact a barrier to the discovery of new truths.

Hence, the invention of progress had little to do with deduction, but everything with induction. One of the most influential thinkers contributing to this invention is Francis Bacon, famous for laying the philosophical foundations of the modern scientific method. Bacon believed that one's understanding of things was best obtained first through empirical observations and then a careful organization and analysis of those observations; in other words, he interpreted nature, instead of anticipating it, like people before him did [3]. In other words, Bacon argued that induction, not just deduction, should be used as the basis of mankind's expansion of collective knowledge. This paradigm of understanding and learning has gone on to evolve into our modern perspective of research, where evidence, no matter quantitative or qualitative, is synthesized into a thesis that advances the collective knowledge of a field.

Nevertheless, the constructive combination of old processes of deduction and new theories of induction is only part of the explanation as to why the invention of progress succeeded, impacting the world to such a huge extent. Another key component, quite ironically, seems to be the opposite of knowledge and progress, that being ignorance, along with its discovery.

How Ignorance Propels Us Forward

The discovery of ignorance can be seen both as a prerequisite and as a consequence of progress. Such an intertwined relationship with progress makes ignorance an important force that propels progress forward; ignorance helps us progress, progress makes us realize our ignorance, and that ignorance further makes us progress.

The definition of ignorance as a prerequisite for progress can be seen in the fact that progress often occurs only when previous assumptions go under scrutiny. Prior to Enlightenment Europe and what many call the scientific revolution of the 16th and 17th centuries, humans largely believed that all possible knowledge and wisdom was already known to mankind, often in the form of religious scriptures or ancient texts. All that was left was for individuals to learn, and in many cases, simply memorize that knowledge. Hence, progress remained stagnant for a

significant part of human history, where innovation was itself not yet invented, and humans, at best, found not actual new things but rather just new ways to do old things [4].

The definition of ignorance as a consequence of progress, on the other hand, can be seen in how progress, in and of itself, scrutinizes our preexisting assumptions. With new discoveries come the realization that old perspectives were wrong. Social progress throughout the past few centuries, for example, can be seen in large part as a process where old norms and values were challenged and altered, forming new norms and values. Similarly, natural science progresses through the continual innovation of ways of observing phenomena to reach refined and hence more accurate conclusions. Without progress, past ignorance would not be exposed so thoroughly.

An interesting implication of the powerful alliance between ignorance and progress perhaps would be that ignorance is not at all something to be afraid of. Not only is it a positive good itself, it also is the natural product of something else that is good. To make progress is to embrace and appreciate ignorance as something completely ordinary; the emergence of ignorance, in many cases, is a sign of improvement and advancement.

-Personal Significance-

How the world invented progress and discovered ignorance has affected every one of us. Yet perhaps even more personally significant is how these developments provide us with insights on how to improve ourselves.

First, the concept of progress itself. With progress comes the idea of movement, or in other terms, not staying put. As long as progress exists, one will never be inherently stuck in a bad situation. Sure, getting out of a bad situation may be difficult and require sacrifice, but the opportunity to get out of it always exists. Hence, one should never lose hope that things will turn out for the better, even when things get inconceivably bad, as long as one believes in the ideal of progress and improvement.

Second, how progress can be achieved. To improve, change, and get out of bad situations requires a strong, innate will to change. Maturity is not doing the same thing multiple times, perhaps a little better each time, expecting different results; maturity, instead, is seeing that old methods, ideas, and goals do not work and therefore putting efforts elsewhere. Persistence is beneficial only until it becomes detrimental to the point of stupidity. One's situation changes only when the way one thinks, acts, and carries themselves changes. This may seem scary, especially for those reluctant to change, but it also gives us the wonderful freedom of self-reliance; as long as we change ourselves, we have a decent chance of changing our situation.

Finally, the role that ignorance plays in our lives. As mentioned previously, ignorance acts both as a prerequisite and a concept of progress. Therefore, this part has two parts. Firstly, to get out of a bad situation first requires a sufficient understanding of the situation, and specifically, what is wrong with it, or what is out of your control. The diagnosis of the problem is the first step to solving the problem. Secondly, the sense of ignorance and being out of control that comes out of progress, improvement, and most importantly, change, should not be something scary and avoided. Instead, it is a reflection of your growth and should be treated that way.

Endnotes:

[1] United Nations. "Human Development Index." Human Development Reports, hdr.undp.org/data-center/human-development-index#/indicies/HDI.

[2] McArthur, John, and Krista Rasmussen. "How Successful Were the Millennium Development Goals?" The Guardian, 6 Oct. 2017, www.theguardian.com/global-development-professionals-network/2017/mar/30/how-successful-were-the-millennium-development-goals#:~:text=Between%208.8%20to%2017.3%20million,to%20improvements%20in%20maternal%20mortality.

[3] Francis Bacon (Stanford Encyclopedia of Philosophy). 7 Dec. 2012, plato.stanford.edu/entries/francis-bacon/#SciMetNovOrgTheInd.

[4] Harari, Yuval Noah. *Sapiens: A Brief History of Humankind*. Random House, 2014.