Humanity's simultaneous quest for redundancy and significance - and why the two are a parallel, not a paradox

The storm of construction dust is the first thing that greets me as I step out of my house this morning, as it has for the past month that I've been at home. I cover my nose, and, struggling not to cough, duck into the cafe from where I usually get my morning cup of coffee. As I walk to the station to catch the morning train I see that another area has been shut off for the construction of the metro, with the customary barrier boards surrounding it - "Mumbai is expanding", they proclaim in their bright blue-and-green colour scheme. The construction of the city's first completely underground metro line is a great point of pride for the state government, but for its people, it serves only as a source of constant complaints. "Two more years!" my co-intern cribs loudly to me as we walk to the NGO at which we're both volunteering for the summer, "the workers are so lazy and useless that it'll be close to five. Half the roads blocked, traffic worse than ever because of it, and those idiots in-charge keep prattling on about how we're stepping into the future. Honestly, those useless slackers don't deserve to be paid for the half-assed work they do, half the time I see them lazing around and sipping tea. I swear, we should replace the lot of them with machines. It's only menial labour anyway!"

Of course, she is currently what my city would call "privileged". Working towards a law degree, she'll take a cushy job in a corporate law firm and that will be that. She believes herself to be unique, her skill-set irreplaceable by a machine or algorithm, since after all, not everyone can do what she does - in her words, it requires "that gut instinct" and "perspective". "Most *people* don't have it!" she laughs, "Machines are a far stretch. But they should definitely replace those labourers, after all, that requires no intelligence."

I would disagree. I've stopped by one of those sites and watched the workers' instinct and experience - knowing the perfect thickness of the cement, the height it must be poured from, how to test the strength of scaffolding, and so on. Can a machine be programmed to do that? Maybe. It would require every single one of these parameters to be quantified - would require all these years of experiences and mistakes to be neatly, sequentially packaged as a set of linear commands. It would require future mistakes to identified as such, and to be learnt from. And the only people who can make this even imaginable, let alone possible, are the very people these machines would try to replace. If I were to walk up to one of them and ask them whether they believed their jobs to be in danger of becoming obsolete, they would laugh at me and say the exact thing she said - "a machine can't do what I can."

Learning from our past

Peter Drucker's view on automation can be extended to the AI debate today so organically that one would almost believe he'd predicted it. After all, automation was the first instance of AI. In his 1946 visit to the Mississippi Delta, seeing the mechanical cotton picker replacing labourers in the field, he hit upon the struggle with perfect accuracy:

"It is easy—and very popular in the Deep South today—to see only one aspect of the technological revolution through which the Cotton Belt is passing: the removal of the dead hand of the cotton economy and plantation society, the establishment of a sound agriculture and of a better balance between industry and farming, higher incomes, better living standards, the end of sharecropping—in short the final emancipation of both white and coloured from slavery," Drucker reported in Harper's magazine. "It is also easy to see only the other aspect: dislocation, the suffering, the uprooting of millions of people who will lose their homes and their livelihood.

"However," Drucker added, "the full picture, as in all technological revolutions, emerges only if both—the better life for those who can adjust themselves and the suffering of those who are pushed out—are seen together and at the same time."¹

Drucker predicted the death of the "Blue Collar" worker to the widespread automation that changed the face of the industry in the 20th century.² And he was right. Then, as they are now, the "White Collar" workers were reassured in their belief that they were safe from the automation boom, since after all they were the ones who were vital to the decisions being made - they had "the say". However, as we stand in the 21st century, where Google has so recently demonstrated the power of AI with its extremely human-like new development, the Google Assistant, this belief stands called into question. What we haven't realised is that the beautiful complexities of the human mind cannot be rephrased as a set of commands that we could feed to algorithm - but the right set of commands, when fed to the right algorithm, can complement that complexity in ways that are unimaginable - and that is where the true potential of AI lies.

As someone with an engineering major, I've witnessed first-hand what code is capable of. Actually, that's not an entirely correct statement. I've witnessed what a brilliant *coder* is capable of - any machine or algorithm is only as good as its creator. Google chief scientist

¹ "What Peter Drucker Had to Say About Automation" - Rick Wartzman, Harvard Business Review, November 02, 2015

² Drucker, Peter (December 1995). "The Age of Social Transformation". The Atlantic. Retrieved 12 March 2012

and Stanford professor Fei-Fei Li perfectly encapsulated this with her advocacy for a more human-centered approach to AI. "A.I. is made by humans, intended to behave by humans and, ultimately, to impact humans lives and human society," she said - and it echoes what should, in my opinion, be the path ahead. After all, the creator builds their code to help them, be of aid in a way that would increase efficiency, not to replace them, because to do would result in a deviation from the end result - for the task at hand to be completed best.

And so we come to the fundamental point of this debate. We, all of us, wish to be seen as irreplaceable - the battle for significance - but we would like to see the people whose skills, work or expertise we consider sub-par for whatever reason be replaced by sleeker, more efficient automation - the battle for redundancy. What we don't realise is how deeply entwined the two are - that in a quest to make even a single portion of society redundant, we are unknowingly wishing for a future in which all of us are. Instead, we can fight for each member of society to be significant - paving the way for a future in which all of us are.

Management, organisations and the future

In his 1959 book, 'The Landmarks of Tomorrow', Drucker suggests "the most valuable asset of a 21st-century institution, whether business or non-business, will be its knowledge workers and their productivity." Drucker believed employees to be assets, not liabilities, and believed knowledgeable workers to be key to the modern economy. Central to this philosophy is the view that people are an organization's most valuable resource, and that a manager's job is both to prepare people to perform and give them the freedom to do so.³

So far, upper-management echelons seem to emulate this edict only in letter, not in spirit. For this philosophy to work, it has to extend to every member of an organisation. In the age of AI, most organisations seem to be fighting to make as many of their members obsolete as possible, believing that is the way the profit lies. Very few, if any, have considered an alternate approach - that of integrating the products of this changing time by training people to be best-equipped to work *with* them, not by replacing or removing them. This is where Drucker's concept of decentralisation becomes so important. Drucker favoured decentralized organizations because they created smaller groups in which employees could remain motivated and invested by actually watching their efforts bear results, and nascent leaders could make mistakes without severe consequences. He discounted the command and control model, asserting that companies worked best when they were decentralized. According to Drucker, corporations had a tendency to over-produce, over-hire (when a better solution would be outsourcing), and over-expand. He believed in replacing the

³ Drucker, P. F., Collins, J., Kotler, P., Kouzes, J., Rodin, J., Rangan, V. K., et al., The Five Most Important Questions You Will Ever Ask About your Organization, p. xix (2008)

pursuit of success with the pursuit of contribution, knowing that the former would inevitably follow.⁴

Drucker emphatically believed, "Management is doing things right; Leadership is doing the right things."⁵ The importance and relevance of this in a rapidly evolving world cannot be overstated. We need leaders who understand management and managers who understand leadership - we are lost without either of them. Doing the right things in the right way is what will define the imminent age of AI, and determine the place people will have in the world as technology blitzes ahead.

In conclusion

So many of us today struggle to define what AI means to us. Is it a threat, simply a passing buzzword, or truly the future? Should we dread it or look forward to it? "You can go from the International Federation of Robotics on one side, which argues that we are on the cusp of the biggest job renaissance in history, to Moshe Vardi, a Rice computer scientist, who argues that all human jobs will be obsolete by 2045," observed John Markoff, in his book *Machines of Loving Grace: The Quest for Common Ground Between Humans and Robots*. Both groups believe firmly in their beliefs, and they have the research and the numbers to support it. To me, this debate always brings to mind this quote by Henry Augustus Rowland - "There is no such thing as absolute truth and absolute falsehood. The scientific mind should never recognise the perfect truth or the perfect falsehood of any supposed theory or observation. It should carefully weigh the chances of truth and absolute error."

And that, truly, is the point I believe we should strive to reach. Staying human in a "robot" society depends heavily on the kind of society *we* build - for while it is an inescapable fact that technology will have a major role in the world and in our lives as we move forward, it is equally true that we, as a society, will be the ones responsible for how much this coming world values the people in it. And so, as ironic as it is utterly fitting, the fact remains that our humanity - our imagination and immaturity, courage and cruelty, creativity and rigidity, belief in right and wrong, and so many other qualities, both conflicting and complementary, which we cannot define - is what will define how human the world to come will be.

⁴ Buchanan, Leigh (19 November 2009). "Peter Drucker from A to Z". Inc. magazine. Retrieved 12 March 2012

⁵ Peter F. Drucker, The Essential Drucker