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The acquisitive impulses of hundreds of millions of people could become the stuff of their imprisonment or death. Jared Rodriguez / Truthout

Amazon is seeking to build a global "brain" for the Pentagon called JEDI, a weapon of unprecedented surveillance and killing power, a profoundly aggressive weapon that should not be allowed to be created.

Founded in 1994 as an online book seller, Amazon is now the world's largest online retailer, with more than 300 million customers worldwide, and net sales of \$178 billion in 2017.

Amazon has built a vast, globally distributed data storage capacity and sophisticated artificial intelligence programs to propel its retail business that it hopes to use to win a \$10 billion

Pentagon contract to create the aforementioned "brain" that goes by the project name Joint Enterprise Defense Infrastructure, a moniker obviously concocted to yield the *Star Wars* acronym — JEDI.

As of the October 12, 2018, deadline for submitting proposals for JEDI, Amazon is the betting favorite for the contract, which will go to just one bidder, in spite of protests by competitors, chief among them Microsoft and IBM. The Pentagon appears likely to select a winner for the contract in 2019.

Jedi Powers?

In discussing JEDI, Pentagon officials refer to the need for efficiencies in sharing data among its military branches , with the goal of increasing the "lethality" of the US war machine.

JEDI is intended to not only improve information sharing, but to dramatically increase the US military's ability to collect and sort through huge amounts of surveillance information from many, many sources on individuals and groups – governmental and non-governmental – around the world. This will be part of a process of using artificial intelligence and algorithms to identify probable targets for killing.

JEDI will do what is being done now on a less coordinated scale and with a smaller volume of surveillance data, but JEDI, <u>The Guardian reported recently</u>, "promises to find those enemies faster – even if all it takes to be considered an enemy is exhibiting a pattern of behavior that a (classified) machine-learning model associates with hostile activity. Call it death by big data."

In addition, JEDI will very likely to be at the heart of managing the first generation of operational US robotic land, sea, air and space weaponry

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Decisions on who and when to kill based on human and JEDI's massive, fallible artificial intelligence will almost certainly be significantly guided by the concept of pre-emptive killing — that is, assassination or larger attack based on suspected threat.

If Amazon gets the Pentagon contract, the acquisitive impulses of hundreds of millions of people may well become the stuff of their imprisonment and, in some cases, their deaths.

This concept, <u>developed in latter-day warfare by Israel</u>, is the premise of the burgeoning US drone war campaign and possibly in more conventional war to come.

Thus, JEDI will generate new levels of global fear, violence, repression and conformity in the service of Western US corporations, following current US policies. These policies are most evident in US intervention in nations like Afghanistan, in which there is local resistance to Western efforts to capture resources.

It appears very possible that if Amazon gets the Pentagon contract, the personal profiles of its customers around the world, developed to stimulate retail sales, will become, either individually or as aggregated, instruments of these customers' intimidation and control. In a real way, the acquisitive impulses of hundreds of millions of people may well become the stuff of their imprisonment and, in some cases, their deaths.

Further, JEDI as a global presence represents the creation of a weapon that dramatically ups the level of global military rivalry and ensures more global human conflict. JEDI demonstrates a new level of US determination for global domination that can only be described as disastrous.

The US public's acceptance of rampant militarism, of which JEDI is a manifestation, is clearly driven by fear of "terrorism" and racial, ethnic and religious differences.

The creation of JEDI is further enabled by the public romance with electronic technology, driven by an infatuation with conveniences that this technology almost magically delivers. What could be bad about JEDI if it is brought to life by Amazon, possibly the foremost purveyor of electronic wonders such as Alexa, the genie-like virtual servant that it brings into the home?

However, JEDI is about the bloody human reality of war, conquest and repression. The

question is: Should the creation of JEDI be permitted by citizens of the US and the world?

To better understand the basis for the foregoing assertions, our current situation and what we might do about it, it is necessary to understand why Amazon is the frontrunner for the JEDI project, and then examine the officially announced goals of JEDI.

Lifted to Dominance by Its "Cloud"

As Amazon's online retail business grew from books to listing more than <u>3 billion products</u> across 11 marketplaces, Amazon engineers created a massive number of computer banks to store and sort data on orders, shipping, inventory, and to do thousands of other functions. The system, which utilizes robots, also had to have artificial intelligence (AI), a rudimentary "brain" that would, for example, read customer product reviews and, using a built-in sorting program — an algorithm — decide which reviews are most helpful. The thinking of the AI brain depends, of course, on what Amazon programmers tell it to look for.

JEDI is being created to dramatically increase the gathering and managing of information to identify people to target for killing, and to increase the speed of killing.

As this computer system and its artificial intelligence expanded, Amazon executives realized that they had created a network of computer hardware and software that would be useful to other businesses, to whom they could rent operating capacity. This would, of course, save those businesses the time and expense of creating their own systems from scratch.

The demand for these services led to the creation of Amazon Web Services (AWS), which was launched in 2006. AWS services individuals, businesses and governments. Notable clients include Airbnb, the Food and Drug Administration, the Centers for Disease Control and Prevention, Netflix, NASA's Jet Propulsion Laboratory, the United Kingdom's Ministry of Justice and the Central intelligence Agency (CIA).

The \$600 million AWS contract with the CIA intends to improve information sharing among 17 intelligence agencies and dramatically speed up "collecting and analyzing an amalgamation of information from sensors, satellites, surveillance efforts, open data repositories and human intelligence, among other sources."

While Microsoft, Google, IBM and smaller companies offer "cloud" services, Amazon is the world's leading cloud provider. Google, for instance, <u>announced</u> in February 2018 that its cloud business earned more than

\$1 billion per quarter

, compared to AWS, which is netting over \$5 billion each quarter.

"In cloud computing," <u>Government Executive reports</u>, "there's Amazon Web Services and then there's everybody else."

AWS is the most profitable of all Amazon businesses, including its online retail business. It has developed into a global "cloud" network with distinct individual operations in North America, South America, Europe, the Middle East, Africa and the Asia Pacific. As of 2014, AWS had 1.4 million computer servers in various parts of the world.

Amazon has also moved rapidly ahead with <u>artificial intelligence</u> in projects such as Alexa, which, when combined with the capabilities of the AWS cloud, allows Amazon to offer artificial intelligence options to its cloud customers. This would presumably give the Pentagon increasingly sophisticated ways of storing and analyzing visual, voice and positional data on thousands upon thousands of potential targets and in launching attacks.

Privatizing the Pentagon's Brain and Central Nervous System

<u>According to numerous reports</u>, the JEDI project stems from the conclusion of Pentagon officials that the US military needs a "brain" operating on cloud technology. The <u>Pentagon's Request for Proposals (RFP) to create JEDI</u>

says the system must be able to provide information simultaneously to "all Military Departments (Army, Navy, Air Force), DoD (Department of Defense) Components, the Defense intelligence community, and the Office of the Secretary of Defense; the US Coast Guard; the Intelligence Community; international allies and partners; and contractors supporting defense business and mission operations."

JEDI, the RFP says, is intended to enable "our warfighters and leaders to make critical data-driven decisions at 'mission speed.'" It will offer services, the RFP continues, at all levels

of secrecy "across the home front to the tactical edge, including disconnected and austere environments (combat zones of all sizes, from special forces operations to massed troop and air operations)."

We have to decide whether we will consume our way into a loss of democracy as well as selfhood.

The Pentagon leaders have decided that the Pentagon is way behind in developing cloud capability. So, rather than having the military build its own "brain," the Pentagon will pay to use — and to expand the power of — an already existent corporate cloud.

"We want to bend the Department of Defense around the commercial cloud," <u>said</u> Chris Lynch, director of the Pentagon's Defense Digital Service. "I can't make that point enough. We want it here, and we want it out in those austere environments. We want to bring this to the warfighter."

Given the global scope of AWS operations, it is obvious why Amazon is the front-runner for the JEDI contract.

What Will JEDI "Know"?

To understand the implications of JEDI, we must realize that the information being gathered and sorted will inevitably be used for the targeting and killing of not only opposing government-based military forces, but also nongovernmental individuals and groups who are viewed as political or potential military threats by the US. And this information will be gathered on a global scale.

JEDI's brain will almost certainly be fed a set of criteria commonly used by governments for identifying potential "threats," such as political ideology, intellectual and religious pursuits, ethnic and racial origin, race, sexual orientation and social relationships.

We will not know specifically all of the criteria that will be used to define an "enemy" of the US, nor do we know specifically who decides on these criteria. This type of information-gathering and target identification are already a Pentagon activity used to target US drone

assassinations.

JEDI would obviously "benefit" from having access to the millions of personal profiles developed by Amazon and other major cloud operators and any other personal information it can capture. Significantly in this regard, there is nothing in the JEDI RFP that specifically addresses the issue of privacy, an obvious human right, specifically defined as such in the UN Universal Declaration of Human Rights.

As noted earlier, the long-standing Israeli state <u>practice</u> of preemptive assassination that informs the US drone war program will almost certainly be applied to all JEDI findings of potential threat, regardless of the gross human tragedies caused by <u>US killer drones</u>

A lack of official US concern about the legal and ethical concerns of preemptive killing is evidenced in the way the US completely ignored a 2013 UN call for it to observe international law with respect to its drone attacks, a watered-down plea that should have been a call for a

Amazon's Prying Ears and Eyes

total halt in US drone war.

A recent <u>report</u> in The Intercept suggests that when it comes to privacy, Amazon is highly suspect as a potential enabler of government snooping.

The report describes a patent that Amazon is seeking that will allow its Echo voice-activated home computer to collect data on the user's "voice features." Language, accent, ethnic origin, level of emotion, gender and age will all be swept up into a file on the user, purportedly with the intent of targeting advertising.

As the report notes, Amazon has been peddling its facial recognition technology, called Rekognition, for government surveillance, including to Immigration and Customs Enforcement (ICE) officials. In June 2018, a group of Amazon employees wrote a letter to CEO Jeff Bezos

saying that they refused to work on technology that empowers ICE.

Moreover, in a thorough discussion of the ethical issues facing Amazon and other cloud makers, an Amazon employee writes:

The current political environment makes the idea of selling we require our Rekognition customers to follow the law is no guarantee of civil liberties at all — it's a way to avoid taking responsibility for facial recognition products to the government even more objectionable. Police have stepped up spying on black activists, and the Trump administration is continuing its all-out assault on immigrants.

Supercharging surveillance is not something we want to contribute to in any way. For Amazon to say that the negative uses of this technology.

What Does It Tell You When Tech Workers Rebel?

The call to conscience from Amazon workers is part of a spreading movement among computer technicians, originating in the major cloud providers.

Concerns about the gathering and management of data for JEDI, and a smaller, related Pentagon project called Maven, brought a rebellion from Google employees that led Google management to <u>drop out</u> of the competition to create JEDI, and it will not work on Project Maven after the end of 2018.

"We are not bidding on the JEDI contract," a Google spokesperson said in October 2018, "because first, we couldn't be assured that it would align with our <u>AI Principles</u>." The second reason, the spokesperson said, is because some of the <u>JEDI work</u>

would not be covered by its current government certifications.

A <u>petition</u> circulated in mid-2018 by a group known as the Tech Workers Coalition, addressed to Amazon, Microsoft, Google and IBM, the leading cloud companies, stated:

We can no longer ignore our industry's and our technologies' harmful biases, large-scale breaches of trust, and lack of ethical safeguards. These are life and death stakes. We risk potentially catastrophic outcomes if we continue to deploy global technical systems without care, deliberation, and a clear understanding of our significant responsibility.

In October, coinciding with the deadline for submitting bids to create JEDI, Medium published an <u>open letter</u> from a group of Microsoft employees to Microsoft's management that concluded: "Microsoft, don't bid on JEDI."

Amazon and Microsoft Bosses Ignore Worker Concerns, Pledge Pentagon Allegiance

Coinciding with the submission of Amazon's and Microsoft's bids for the JEDI project, the bosses of these companies found it necessary to publicly discount the ethical concerns of their employees and to assert that their companies will be, first and foremost, loyal to the military and social goals of the US government, regardless of what they are.

"We are going to continue to support the DOD, and I think we should," Amazon CEO Jeff Bezos said in an October 2018 interview with Wired magazine. "If big tech companies are going to turn their back on the Department of Defense, this country is going to be in trouble."

As for concerns about Amazon's facial recognition technology being used for immigrant surveillance, Bezos said:

I'd let them in if it were me. I like 'em, I want all of them in. But this is a great country, and it does need to be defended.

On October 26, 2018, Brad Smith, president of Microsoft, <u>said in a statement</u> posted on the Microsoft website: "First, we believe in the strong defense of the United States and we want the people who defend it to have access to the nation's best technology, including from Microsoft."

Who Will Be in Charge?

The transfer of a massive amount of military information into a privately owned and built cloud, as will happen with the creation of JEDI, raises the possibility that the owner or owners of that cloud will — because of their knowledge of the cloud structure, capabilities and content — become more powerful than military and elected officials. Such a transfer has never happened before, and the RFP for JEDI does not speak to the question of how JEDI will remain in governmental control.

The degree to which the JEDI cloud provider may be willing to assert control over US politics and military decisions in the absence of specific controls may depend solely on that provider's ambitions.

In the case of Amazon, we find in Jeff Bezos a person who has shown a determination to be a very big player in Washington. He owns The Washington Post and has become a formidable_lobbying-force . Amazon

has increased spending on lobbying from less than \$1 million in 2000 to \$13 million in 2017; so far, \$10.6 million has

been reported

in 2018.

What Does JEDI Mean to the US and the World?

In *A Theory of the Drone*, Grégoire Chamayou observes that it is important to understand how a weapon works in order to understand what its use will lead to "not only in their relation to the enemy but also in terms of the state's relation to its own people."

In the case of JEDI, we have a weapon that is being created to dramatically increase the gathering and managing of information to identify people to target for killing, and to increase the speed of killing.

In the current world of intensifying conflict over oil, gas, minerals, agricultural land and water, the most likely targets for killing are Indigenous people of color who are resisting extraction of their resources by stronger military powers. These people will be known officially as "rebels" or "extremists." Think Afghanistan and Yemen.

As it gathers more and more information, JEDI will bring a major up-tick in ongoing systematic global killing through assassination by drones, special operations teams and, soon, robots. JEDI will mean an increased day-to-day threat level for millions of people, particularly in the world's poorest places.

JEDI will further concentrate power in the hands of fewer people, controllers of technology who already have too much economic and political power. Giving these individuals control over such a powerful weapon, and making that weapon so completely dependent on technology that these individuals control it virtually ensures there will be no antitrust action to break up those companies to reduce their monopolistic power.

And further, nothing will likely be done by Congress or regulators to protect the public's privacy from these companies because of damage that might mean to "national security."

In the United Nations, the US will likely act to prevent any attempt to limit global surveillance and high-tech assassination, as it has done in the past.

In the US, the government and the corporations will continue to suppress evidence of the human costs of US wars, will further encourage compartmentalization of human emotion and intellect, and will seek to sustain mass disengagement of conscience.

"We must protect the warfighter" will become the guiding social thought, leaving the true nature of US wars, which is to benefit the wealthy few, beyond the interest, knowledge and control of the vast majority of the population.

JEDI, as a fear generator, is a weapon of conformity, control and theft, hastening human demise, intimidating globally and suppressing diversity of culture, thought and creative action.

JEDI is being visited upon the world for power and profit at a time when what we need is less fear and more ethical behavior, leading to more cooperation. JEDI puts us on the opposite path, and we have to decide whether we will provide the data that will enable JEDI to do that, and, moreover, as US citizens, whether we will allow JEDI to do that to other people. We also have to decide whether we will consume our way into a loss of democracy as well as selfhood.

Will we trade our humanity for convenience, including convenience in killing?

Richie Marini of World Can't Wait and Marc Eliot Stein of World Beyond War, graciously provided technical advice for this article, and Stephanie Rugoff of World Can't Wait thoughtfully selected resource material.