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# Ideologies and Artificial Intelligence

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## Introduction

Artificial intelligence is accused more often than one would expect as being either under the influence of an ideology or as the nefarious product of one. Naturally the standpoint of such accusers also stems from ideologies of their own. This paper introduces ten dimensions for characterizing ideologies in general and mentions seven imputations that ideological concerns improperly motivate and cloud the vision of artificial intelligence proponents. Because of space limitations only the first charge is treated according to the frameworks created here. The purpose of this example is to illustrate the type of analysis that might be done, but other ideological charges are also presented as a matter of record. A brief example and an explanation of each ideological charge are given.

## Conceptual Framework

Needed definitions

Consider this proposed definition of *artificial intelligence*: *that field which attempts to replicate human intellectual and perceptual prowess with computer hardware and software. AI needs only reproduce the same or better results as human intelligence, not its distinctive processes. It is also unnecessary under this view of AI to replicate human emotional states.*

Next, given the varied charges against the AI enterprise, this discussion also requires a non-tendentious definition of *ideology*: a pattern of conviction and values that are capable of invigorating actions.

Types of Ideology, A Taxonomy

It is useful to have a systematic classification scheme to describe particular ideologies. For this purpose, a classification scheme is provided, where each classification category corresponds to one axis in a classification "space." For example, an ideology can be located on the axis of awareness according to the degree that its adherents are aware of their ideology. The degree of awareness would be determined empirically. There are ten such dimensional-axes (categories) presented here. Each dimension is designated by specifying a domain (e.g., awareness) together with two contrasting attributes (e.g., unconscious and conscious) corresponding to the two (positive and negative) rays of an axis in spatial coordinate system. For each classification category (i.e., axis), an explanation of its domain and contrasting pairs is presented below .

### 1. Awareness: The Unconscious-Conscious Dimension.

The definition of ideology (offered above) allows for both consciously held beliefs (and value systems) as well as those that are unconscious. A common view, of course, is that ideologies are primarily unconscious; as Louis Althusser, has opined: "Ideology has very little to do with 'consciousness'. . . It is profoundly unconscious." Notwithstanding Althusser, there must be provision for the opposite alternative, as evidenced by vocal adherents of various ideologies consciously advocating their positions.

### 2. Publicness: The Private-Public Dimension.

While most ideologies are maintained by a sizable population and known to the world at large, some groups are quite capable of maintaining a private ideology and may burst onto the scene with some

surprising action, as a terrorist attack by an unheard of faction. Perhaps all public ideologies start out as private.

### 3. Psychological Governance: The Fundamental-Incidental Dimension.

Ideologies can be truly fundamental principles for their adherents, coloring--even governing--all one's thoughts and attitudes, while other ideologies may exercise no such dominance.

### 4. Receptiveness to differing ideas: The Dogmatic-Reasonable Dimension

The type of conviction with which an ideology is held can range from unwillingness either to offer or consider opposing points of view to complete open-mindedness. Ortega y Gasset, the Spanish essayist and philosopher, described the close-minded ideologue: "Under the species of Syndicalism and Fascism there appears for the first time in Europe a type of man who does not want to give reasons or to be right, but simply shows himself resolved to impose his opinions."

### 5. Veridical basis: The Mythical-Scientific Dimension.

According to Sidney Hook, Marx regarded all ideologies as either myth or scientifically grounded.

### 6. Meaningfulness: The Incoherent-Sensible Dimension.

Marx also regarded some ideologies as either "false, refuted or refutable by evidence," or else too ill-defined to be proved or disproved. Since the logical negation of a hopelessly muddled statement would itself have little or no logical force, there can be no effective refutation--other than to pronounce an ideology senseless.

### 7. Interventionist Tendency: The Active-Passive Dimension.

It must be determined if an ideology calls for a program of action or exists merely as a passive *weltanschauung*. Jiang Qing, wife of Mao Zedung, issued a battle-cry: "There cannot be peaceful coexistence in the ideological realm. Peaceful coexistence corrupts."

### 8. Type of support: The Unsupported-Rationally Argued Dimension.

Many religions and parties have elaborate *apologias*; *others offer little or no self-justification, just a requirement of unquestioning faith.*

### 9. Type of Appeal: The Objective-Emotional Dimension.

Marx is famous for his emotional appeal in the Communist Manifesto: "...you have nothing to lose but your chains."

### 10. Recruitment: The Selectivity-Proselytizing Dimension.

Some religions and political parties openly recruit, while others limit membership or rely solely on an individual's initiative to find his/her ideological home.

Note: It is not always necessary to invoke each and every one of these conceptual dimensions to characterize an ideology. In fact, some of these attributes logically exclude others. Furthermore, there are cases where it is so obviously unnecessary or else simply not effective (e.g., for lack of relevance) to specify a certain dimension for a particular ideology.

This article next considers seven different charges that attribute an undesirable ideology to AI (and its proponents). For illustrative purposes However, space restrictions permit room for an extended discussion and classification only for the first of these (), and with no mention of degrees.

## Charges against Artificial Intelligence

### 1. Socio-political or economic claim about AI's motivation

This charge proceeds along standard Marxian lines: Artificial intelligence is not simply a harmless advance in science, but is in fact a bourgeois tool to advance the capitalist program to displace workers by intelligent programs and robots. As such, the proletariat is justified in resisting AI in its continuing political struggle against the capitalist class. Moreover, can this struggle cannot be regarded merely as a Luddite and mindless opposition to progress.

This indictment accords with Marx's own well-known complaint that the capitalists of his day were continually trying to increase surplus value primarily by lengthening the working day or by increasing efficiency. The primary issue in this charge, however, appears to stem more from concerns about personal, economic well-being than political ideologies.

The indictment overlooks that these workers have been relieved of certain tedious and dangerous tasks that have been turned over to computers and robots. Moreover, the new technology itself has created a large number of jobs, though not necessarily for the workers displaced.

Marxian ideology is also interested in the alienation (created by the factory system) of workers from each other and from their handiwork. AI contributes to that kind of alienation but also introduces a quite different type of alienation due to an unexpected role reversal. Knowledge workers, who are relieved of decision-making in their jobs by AI, feel less than human since they are relegated to following the instructions of a machine. They would perceive themselves as functioning in mechanical, non-human roles, for the machine has usurped an important human trait and, consequently, reduced their feeling of self-worth.

The ideological typing of the original charge may be fairly construed, according to the above framework, as (1) consciously held; (2) public; (3) being a principal motivation; (4) having a dogmatic nature; but (5) based on evidence; (6) totally coherent; (7) calling for action (to stop AI); (8) rationally argued; (9) but appealing to emotions; and (10) trying to recruit.

The ideology of *those making the charge probably expresses a group belief and is based on a fundamental principle* of economic fairness. Even though it ignores the potential of AI to be a liberator of the working class, it may be revisable once this is pointed out. In fact it could be argued that an AI expert system may one day offer the best plan to accomplish that liberation.

### 2. Warning about AI's deployment to achieve hegemony

This charge alleges a danger in the use of computers and, by extension, of AI as well, for world domination. One version of this charge asserts that certain elitist elements maintain an ideology causing them consciously to seek a "new world order" through technology.

One could make a somewhat less paranoid point about hegemony. Inevitably as people are replaced by machines, those in control of the computers, particularly in large organizations, tend to find themselves in positions of ever increasing power. This power is further magnified by having potent machines to do the bidding of their owners and manipulators. This state of affairs arises without actual conscious planning to arrive at such a result, but before long those in control (the computer "patriciate") might rationalize their advantage and develop a hegemonic ideology to ground and justify their being in control.

### 3. Denunciation of AI as anti-spiritual or as anti- humanistic.

This charge is neatly and poetically captured in the following verse (although not directed specifically against proponents of AI): "Your worship is your furnaces,/ Which like old idols, lost obscenes/ Have molten bowels; your vision is/ Machines for making more machines." The author of these lines, Gordon Bottomley, actually lived long enough to have entered the era of AI, but probably never heard of it; yet he can be interpreted as presciently attacking the notion of machines that can reproduce themselves. It is probably enough of an ideological issue for most people to deal with machines that seem human, let alone those capable of breeding--a contingency that has been proved to be at least theoretically possible by John von Neumann.

### 4. Caustic professional criticism of AI's champions for overreaching.

The charge of harboring an ideology can occur even within the AI community itself, when one party accuses another of attempting to incorporate more hominine qualities into machines than can be rationally warranted, or for forming a close-minded, scientifically overambitious faction within the science. For example, S. Papert, a distinguished computer scientist refers to a famous treatise on artificial neural networks as a "connectionist manifesto."

### 5. Protest against AI's denigration of human capacities and status.

This attack on AI stems from the purported ideological identification of machines and humanity, not because it unduly elevates machines, but because it diminishes humanity to be compared to and simulated by mechanical contrivances. Psychologists, however, seem to have welcomed the advent of the computer as a tool in their researches into the workings of the mind, but ironically it is the very potential of the computer to model the human mind that seems to give rise to this complaint. People now perceive themselves as soulless machines, endowed with the ability to make mechanical decisions but powerless to make "real" choices.

### 6. Protection of the relative "superiority" or distinctiveness of humanity vis à vis machines.

It is affirmed that machines can never think like a human because they lack emotional understanding. Neil Postman complains of the opposite ideology: "We have devalued the singular human capacity to see things whole in all their psychic, emotional and moral dimensions, and we have replaced this with faith in the powers of technical calculation."

### 7. Castigation of AI's proponents as misconstruing the nature of thinking.

This charge pertains to the controversy dividing the partisans of what has been called "Strong AI" versus those of "Weak AI." John Searle contrasts these two positions regarding AI: (1) the *position of Weak AI, which claims that AI is merely a tool to model or to help study the mind, and (2) the ideology of Strong AI, which claims to have produced an entity equivalent to the mind. Searle argues against the possibility of Strong AI on the grounds that machines lack intentionality and an understanding of what they are doing.*

## Concluding Remarks

The main objections to work in artificial intelligence and its effective implementation derive from the aforementioned ideological viewpoints. Moreover, the accusers claim that the motivations of AI proponents are influenced by detrimental. Needless to say, all this (primarily) nonrational controversy can severely inhibit both the progress and acceptance of the entire field. Therefore the characteristics of the contending ideologies and the ideological dispositions of their supporters need to be well understood. Once they are sufficiently apprehended, appropriate strategies can be constructed for dealing with the charges as well as the people making them. For example, rational confrontation and rebuttal will not avail in dealing with

incoherent, unsupported, activist denunciations of AI as anti-spiritual or as anti-humanistic. A better strategy would be an emotional recasting of AI's image in a humanistic mold with the aim of redirecting the activism.

Aside from considerations of strategy for protecting the AI enterprise from both internal and external assaults, there remains the value of an initial thrust at classifying the world's ideologies provided by the above taxonomy.

References are available from the author.