

An Outline of My Project (January 2023)

Preface: My loyal supporters—David, Teresa, and Jeremy—have been requesting a further written development of my ideas. I have resisted for two reasons, one of weakness—I don't write easily and find it nerve-wracking—and the other more rational perhaps—my ideas are jelling rapidly and improving from week to week. But I am now entering a critical period in my treatments, and don't know how much longer my stamina (mental and physical) can hold out, so it is time to jot down at least a rough outline of what's to come.

1. The big picture: A, the physical world, B, the living world, C, the human world. I think of B as a minute portion of A, and C as a minute portion of B. These connections are important, for if life springs from A, and humans from B, this tells us something of the potentialities of A and B, to be incorporated into a final picture of the whole.

A. a realm of fields, forces and energies, connected by causal laws operating in space and time, specifically gravitation (Newton), electro-magnetism (Maxwell) and optics (both Newton and Maxwell).

B. dominated by two great Darwinian ideas: natural selection (the struggle for existence), and the tree of life (transformation of species into others, possibly stemming from a single origin, over eons of time). Varieties fall into a hierarchy, classified by Kingdoms, Phylums, Orders, Families, Genera, Species, sub-species, etc., connected to time-order, and varying over space. Darwin stressed competition among types, but others have noted cooperative aspects:

symbiosis, division of “labor” among specialists, group solidarity, and the intricate physiology of cells and organs in living bodies, the parts contributing to keeping the whole in existence.

C. when it comes to human nature, folklore enters. The various societies have their versions of human origins, often part of comprehensive religious world-views. The conflict with Darwinian views is still ongoing. But we—who accept the evolutionary story—should not be misled: something very important has arisen not shared by any other surviving species. It is tied in with language. Now, it is true that other animals have developed some linguistic abilities to signal each other, but the gap is now so wide as to constitute a qualitative change (which I will try to analyze later).

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On the other hand, it is vital to remember our ancestry, as this provides other essential clues to human nature. The latter may be divided into two broad categories: the *cognitive* and the *emotive*. Cognition refers, in part, to what people think the world *is* like—both in their immediate surroundings, but also what it *was* like in past times and places, what it *is* like in other places, and what it *will be* like in the future. Obviously this depends a lot on who the person is (their age, experience, abilities, education, acquaintances, etc.). They may have doubts about some of these beliefs, which means they attach weights to them--“possibly,” “likely,” “almost certain.” And they have a—possibly vague—sense of causation tying these beliefs together. But cognition also includes imagination and thinking: fantasies, fictions, what-ifs, mathematics. Finally, cognition almost always includes the self: what am I doing, was I doing, will I be doing.

This last thought leads one to the emotions, and the cognate terms motion and motivation. I also want to pay closer attention to the nature of time and space, which are closely tied into these ideas. We are always doing something, if one allows “doing” to include waiting (“They also serve who only stand and wait” – Milton, *On His Blindness*). One of our strongest intuitions is of the directedness of time: causation always goes from the past to the future, never the reverse. If we act now, we can influence the future, but never the past. On the other hand, our knowledge of the past—sketchy as it is—is more secure than that of the future, precisely for that reason: the future is open to alternatives. We can and do learn more about the past, but cannot change it. Furthermore, the past is always expanding: if we think of “now” as a knife-edge point in time, it is advancing into the future at the rate of one second per second (or one year per year), converting the near future into the recent past. (What we usually call “now”—as in: I am acting now, or this is happening now—is always time expanded, or we wouldn’t be able to perceive it). To return to acting: I claim that acting is motion in the literal physical meaning of that term: “movement in space.” To take some purported counterexamples: *change in color*: this is motion at the molecular or tissue level, which we don’t perceive directly; *speech*—vibration of the vocal cords, creating a wave motion in air, which may reach another’s eardrum; *thinking*—electro-chemical motion in the nervous system.

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Given that action is motion, and given that the sciences of the physical world are all about motion at some level (physics, chemistry, geology, etc.), this suggests another reason for

linking A to B and C above. Our tools are all designed to facilitate, inhibit, or twist motion in one form or another. Also, the reach of our actions depends on the state of our transport-communications media. It also gives the first hint of *investment*: we first improve our networks or media, and then utilize them to greater effect.

Turn next to *motivation*. What do humans want to accomplish? Before trying to answer this question, let's consider the sources of our information. The first is that we are humans, and we live among our fellow humans. The natural assumption is that they are like us, as a rule. That is, we simulate in ourselves, and attribute to others, similar feelings, beliefs, etc. (But if this is so, how come physics is so much more advanced than any social science?) The second source of information is what we learn from history and geography about how people behaved in other times and places. And beyond that, given archeology and conjecture, how they must have behaved to survive ice ages, volcanic eruptions, and hostile neighbors. And finally, we learn from studying our simian contemporaries who branched off relatively recently from the tree of life with common ancestors.

Let's assume that people really do have a choice in how they will act. (Later we will discuss whether this choice is illusory, in a "deterministic" world.) The choice cannot affect the past, since this has already been laid down, but only the future. Yet people's motivations often—maybe always—involve the past: *Reciprocity*—doing good for those who have done good for us and our goals, and bad to those who have harmed us—seems to fit a broad swathe of human actions. (Adam Smith referred to this propensity to trade and barter—exchanging good for good—as a trait that is unique to the human species.) We feel

that those who have contributed to us—or to our family, tribe, nation, even to the world as a whole—should be rewarded; those who have harmed should be punished.

Once this dichotomy—between motivations and actions—has been noted, its pervasiveness becomes apparent. Let's enumerate some classes of actions to see how it works out.

Humans, a recent twig in the tree of life, have the corresponding emotions: hunger, lust, avoiding predation, raising children, dealing with fellow tribesmen, etc.

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The direct motivation for sex is lust, not necessarily the thought of having more children (the causal connection here might not even be known in some tribes—a controversial thesis). The motivation for eating is hunger, not necessarily the thought of keeping oneself alive.

What's going on here? Consider standard economic theory at this point. Each economic agent (persons, firms, etc.) has a mental picture of the world, perhaps extending to the near future, in response to the possible activities the agent can choose. The agent also has a preference order—usually represented by a utility function—over the alternative future worlds stemming from his choices, and of course chooses the most preferred of these actions. (If there is uncertainty in the outcomes, as represented by a probability distribution over them—the agent is assumed to choose the action that maximizes the expected utility of the action.

Herbert A. Simon devoted much of his career to debunking the mechanics of this model, substituting what he called “bounded rationality”: people have a very sketchy view of the real world, they do not perform the implied calculations needed to maximize (expected) utility, and consider only a tiny fraction of the possible activities available. Simon, a renaissance man, started out in political science, passed into psychology, and eventually won the Economic Nobel Prize in 1978. Important followers are the psychologist Gerd Gigerenzer and his school.

One aspect of bounded rationality is noted above: We do not—and cannot—contemplate the full consequences of our proximate acts. Instead, we transform our aim to a “proxy” utility function leading to choice in the short run, and hope for the best.

[his note: start 12/20/22]

Even with the impoverished discussion above, we can make some startling inferences (not necessarily correct). In Genesis 23:15, just after Abraham had made clear his willingness to sacrifice his son Isaac to God, God promised Abraham that his descendants will be as numerous as the stars in the sky, as the grains of sand at the beach. Clearly philoprogetiveness is a deep preference of Abraham. It is, essentially, a *conscious* version of natural selection. And it is likely that Abraham’s contemporaries had similar feelings for their own descendants. These attitudes, which have persisted through the intervening human generations, lead to radical implications for gender relations, population [his page 5] and even world trade in the 21st century and beyond.

One would predict that with conscious natural selection, the following activities would thus occur: 1) *war*: the carrying capacity of land is limited, so population expansion requires more territory (the same practice occurs among modern chimps (J. Goodall); 2) *hunting*: more or less continuous; 3) *pregnancies* and *child rearing* and “gathering” and “caring” (dispute resolution among women. The sexes tend to specialize in their comparative advantages, men with the more muscular activities—they will assume a disproportionate share of leadership in the governance structure.

Now come to the twentieth century. Population growth has been at an all-time high, to the point where the viability of the earth is threatened. Wars have continued unabated, and the invention of modern weapons has given rise to the second existential threat, atomic extinction. Time for a rethink.

Gender relations. The most aggressive (“right wing” “fascistic”) movements are deeply male-oriented. Mussolini, Italy; Hitler, Germany; Stalin, Russia; Kim Jong Un, North Korea; Mao Zedong, China; Khomeini, Iran.

However, the world as a whole is trending against this male dominance. Population is stabilizing and should begin to decline. Also, the rise of women in leadership makes it less likely that we will kill ourselves in an atomic war.

In most of the rest of the world, the proportion of women in leadership is rising.

Populationism: Birth rates in decline throughout the world, anti-natalist practices on the rise: contraception, abortion, LGBTQ activity.

Further, these ideas change at different rates – cultural lag (W. Ogburn): most advanced in big cities, big debates; least advanced in rural areas, also in orthodox religious areas. In relative terms, the world is urbanizing and decreasing in religiosity, so the advancement of ideas should continue.

Nature of democracy, communication (who do you talk to, who do you pay attention to)

Personal identity. The person one is most acquainted with is *oneself*, always there, except when one is deeply engaged in something else, but there in every act -- _____, wishes, sharings, one's _____, etc. And one is apt to be a bit indulgent toward oneself (mistakes were made but not by me).