This week, we will be looking at the very beginning of at least our history of the social sciences, which brings us to the social philosophies of Saint Simon and Auguste Comte. We will consider a context in which approaches to the study of societies and social problems started to look to the natural sciences for inspiration and methodologies. We'll consider the motivations and aspirations behind such a sciencification of the study of the social elements of humanity, and consider in detail the philosophical underpinnings of this movement.

Our history of the social sciences begins in France at the turn of the 19th century. The French Revolution began in 1789 and ushered in decades of uncertainty and unrest. There was a total upheaval of the structures that had previously governed the country—the monarchy, the church, and the feudal system. France had subsequent wars with a variety of its neighboring European monarchies, including the UK, which was relatively more industrialized. At the same time, they were trying to figure out what this new society of theirs—now free from the shackles of monarchy and feudalism—was going to look like.

In this context, an enthusiasm for science, technology, and industry developed among intellectual and political elites, especially in their combined capacities for military and civil engineering. The secondary educational establishments, which had previously been based on classical education, were replaced in 1795 with the scientifically-focused *Ecoles Centrales* (Hayek 109). Higher education, too, saw the growing prestige of scientific subjects, with the establishment in 1794 of the *Ecole Polytechnique*, a science and engineering school which became a military academy under Napoleon in 1804. Many of France's prominent figures passed through this school in some capacity or another, including Monge (its founder), Lagrange, Laplace, Fourier, Carnot, Saint-Simon, and Comte. Saint-Simon, who we're reading for this week, commented in 1813, "Such is the difference in this respect between the state of. . . even thirty years ago and that of today that while in those not distant days, if one wanted to know whether a person had received a distinguished education, one asked: 'Does he know his Greek and Latin authors well?,' today one asks: 'Is he good at mathematics? Is he familiar with the achievements of physics, of chemistry, of natural history, in short, of the positive sciences and those of observation?' " (quoted in Hayek, 1952, p. 110).

With science and technology becoming center stage, people began increasingly to seek solutions to political, religious, and social problems (of which France had many) using the methods

of the natural sciences. This latter trend found particular concentration in the works of Count Claude Henri de Rouvroy de Saint-Simon and Auguste Comte, whose ideas became the basis for science-fanatic socio-political ideologies hoping to "bring order out of the chaos of post-revolutionary French society by establishing a social science" (Olsen 41). Saint-Simon, the originator of this school of thought, later named "positivism," claimed that France, and Western Europe in general, were experiencing a moment of radical transformation as part of the predestined and inevitable unfurling of human civilization, in which a previous feudal-ecclesiastical system was giving way to its superior successor, defined by science and industry. In actual fact, the traditional economic, religious, and political structures of French society had recently come to an abrupt end with the Revolution. The abolition of feudalism in 1789 had destroyed the feudal economic structures of the nobility and the spiritual authority of the Catholic Church. The military power that supported them both had been restructured during the Reign of Terror.

Saint-Simon claimed that the "social turmoil" that France was witnessing during and after the Revolution was due to society's resistance to the necessary structural changes incumbent in this civilization-shifting process. "Inevitably, [the crisis] will last until the new system is fully operative" (I 152). He believed that the principal cause of unrest in society was "the lack of knowledge" (I87). The new system envisaged by Saint-Simon, which he claimed was destined to arrive sooner or later, was the political organization of society and the economy according to "positive"—that is, observation-based and verifiable—knowledge. "Just as astrology gave way to astronomy, and alchemy gave way to chemistry, so must the conjectural give way to the positive, the metaphysical to the physical in politics" (I154). The ongoing turmoil of domestic French politics, as well as the wars between European states, could be resolved by the institution of a political structure based on "reliable, absolute and universal principles, valid for all times and places" (I 87). This form of government would be derived using the certain principles common to the demonstrative methods of the various sciences, "reason and experience" (I 87, SS33).

"Hitherto, the method of the observational sciences has not been applied to political questions. Every man has brought to them his own point of view, method of reasoning and judgement, and as a result there has been neither accuracy in the solutions found for political problems nor universality in the results applied in this sphere... The method of the experimental sciences should be applied to politics." (I 87)

According to Saint-Simon, there were two ways the application of positive knowledge would correct the political organization of society. Firstly, inaccuracies would be removed, since the method of the sciences was more precise than others, based not on perspective or conjecture, but on objective demonstration. This would enable the generation of genuinely workable solutions to social problems. Secondly (and relatedly), partiality of interests would be removed, since science and positive knowledge would dictate policies which "increase the happiness of the whole of mankind" rather than only "a part of mankind at the expense of the rest" (I 79). Scientific interests were "common to all mankind," and so a society organized according to scientific knowledge would be innately pacifistic, and would draw the voluntary cooperation of all classes (I 79).

For Saint-Simon, any given society had not just a realm of intellectual authority (called "the spiritual") but also material manifestations of that authority in immediate reality (called "the temporal"). In the new system, the positive sciences would have spiritual power and provide the intellectual direction of society, but it would be "industrialists," or specifically "the heads of industrial enterprises," who would hold temporal power and manifest the directions in society that the sciences gave. All members in a society would be "coordinated according to their respective functions" with a unified science "directing them towards a great common industrial purpose" (I 164). This would replace the ancien regime, in which an inefficient feudal economic system was supported by prejudicial ecclesiastical perspectives resulting from the Catholic Church's spiritual power, and was necessarily sustained with the coercive domination enabled by the military's temporal power. The result was an idle aristocracy exploiting a productive industrial class, creating inefficiency and partial interests. The new industrial-scientific system would be supported by the observable, testable, and universally valid knowledge of the positive sciences. It would not require coercion to be accepted since it would be evident to all that it was accurate and in the universal interest of all humanity to pursue and obey it. And it would be maximally efficient for the progress of humankind since industrialists, or those who work to produce "material means of satisfying (human) needs," would be given respect and power over idle aristocrats (I183). For Saint-Simon, the fundamental choice was between a perfect industrial-scientific system and all other flawed systems:

"For a nation, as for an individual, there are in effect only two ends, conquest or work, to which correspond spiritually either blind faith or scientific demonstration, that is to say, demonstrations founded upon positive observations." (I157)

Any system supported by spiritual authorities other than positive science was based on "blind faith" and necessarily partial. Its partiality, both in terms of perspective and interests, brought with it an essential need for temporal power structured according to "conquest" or domination over other human beings in order to sustain it. Most recently, such a system had been the ecclesiastical authority of the feudal system requiring the support of a military power. It had resulted in an ultimately inefficient system of idle aristocracy supported by an exploited industrial class, benefiting only narrow interests. However, a scientific-industrial system would be based on objective demonstrations naturally accepted by all, which would dictate actions and industrial development according to the universal interests of all mankind. Therefore, coercion would not be required, conflict would not arise, and "all classes of society would be happy [with] spiritual power in the hands of the scientists" (I 81). In fact, with the full establishment of this new system of social organization, there would no longer be any "governance" per se, since power over men by men would not be necessary to enlist everyone's cooperation. A mere administration of human industrial activity would be needed, according to observable, verified, positive scientific knowledge. This perfected industrial-technological world would be "managed rather than governed" by talented elites (Olson 41).

"[P]olitics from now on will no longer be a matter of vague conjectures, a plaything of circumstances. Its fate will no longer be determined by any power, form or prejudice. The ground it covers will be known; the way it is conducted will be respected; and the science of societies will therefore have a principle. It will at last have become a positive science." (I109)

A host of Saint-Simon's disciples in the early nineteenth century adopted his grand ideology of a social order structured by the universal dictates of science. Most notable among them was August Comte, who radically increased the popularity of Saint-Simonian positivism, due to a number of differences in theory and focus. Firstly, whereas Saint-Simon was not himself a scientist, Comte was trained in mathematics. Saint-Simon had been convinced of the eventual unification of the sciences under a single science, but Comte's more sophisticated understanding of the historical development of the different sciences meant he appreciated their intrinsic differences of subject matter and method. Comte therefore had more credibility among scientific elites. Comte was also less revolutionary, advocating a gradual transition into a positivist society in which capitalist proprietors

would voluntarily place their wealth at the disposal of scientific and industrial elites. This made his work more tolerable to members of bourgeois society. Comte was also a vocal opponent of colonialism, believing that all societies naturally went through the same stages of development. Colonialism was blocking the development of non-European nations, and positivism would accelerate their development and bring about the global achievement of advanced human civilization. This made his theories popular among progressive leaders of non-European nations, including Brazilian philosopher and mathematician, Raimundo Teixeira Mendes, who founded the Positivist Church of Brazil, and designed the Republic of Brazil's flag in 1889, with its Comtean national motto, "Ordem e Progresso" (Order and Progress). Through Comte, Saint-Simon's positivist theories of science as a principle upon which to order society had a much broader and long-lasting influence than his own writings (Olson 63-64).

Like Saint-Simon, Comte identified the social turmoil in France as due to the incompatibility of two socio-political systems, but he saw the two incompatible systems as the feudal tradition and the revolutionary republican tradition that had succeeded it, rather than the feudal system and a scientific-industrial system that was striving to replace it. He viewed the incompatibility of the feudal system and republican system as being due to logically incompatible principles. Feudalism was structured according to the concept of order, which came from a theological and politically conservative tradition, whereas republicanism was structured according to a concept of progress, which came from a metaphysical and politically revolutionary tradition. Like Saint-Simon, Comte believed that forms of thought and knowledge developed through stages, with positive thought and method as the ultimate stage. Theological thought, which underpins the feudal system, regards the universe as governed by "single and direct volitions of beings, real or imaginary, possessed of life and intelligence" of which the notion of a single God is an example (Mill). Metaphysical thought, which underpins the republican system, regards phenomena as possessing and being moved by "realized abstractions"—by an essence that inheres in them and their "supposed tendencies and propensities" (Mill). The positive mode of thought and knowledge recognizes that "all phenomena without exception are governed by invariable laws" (Mill).

While theological and metaphysical thought were defined by methods consisting in "the preponderance of imagination over observation" (O73), positivism would replace the "imagination" that grounded both these systems with "observation." Like Saint-Simon, he argued that its reliance on observed facts would allow it to produce "unanimous and permanent assent" (O74) and

resolve the political and social conflict caused by the conflicting principles of inferior forms of thought. Positive science and its observational method could render consistent the competing principles in these prior, incompatible traditions, by giving both conceptions a new positive interpretation, and could pave the way for an improved, stable social order.

Like Saint-Simon, Comte stated that **all partiality of perspective** must be banished from positive science, including (and especially) any traces of "admiration or reprobation" (O64), since "all preoccupations of this sort directly and unavoidably tend to hinder or mislead examination" (O64). Also like Saint-Simon, Comte argued that only positive science could bring about consensus in the political structure of society, because "there is no freedom of conscience in the sciences, in the sense that the mind is not free to refuse assent to what has been proved" (O69). Only a positive social science, and a subsequent social organization according to **exclusively objective dictates of science**, could overcome the intellectual anarchy of various philosophies competing for political authority—which included theology, metaphysics, and moral philosophy—by producing claims that would be **universally accepted by all who understood them**. Science was indispensable to social progress and peace.

In the *Positive Philosophy*, Comte stated that even human emotions would come under the domain of scientific direction and control. The powerful **affects** of human life must be subordinated to a "**naturalistic morality derived from our sociological understanding**" (O77), which would produce both individual virtue and social integration, the likes of which "cannot even be imagined without the guidance of the doctrines themselves" (O77, AC). In this sense, positive science would transform society starting from within the individual, rippling outwards into society's institutions. The "moral regeneration" of individuals and their affects according to scientific dictates will "prepare the way for...political reorganization" (O77, AC).

This need for objectivity and its ensuing necessary universal assent led Comte to attack the kind of introspective psychology practiced by John Locke, David Hume, David Hartley, Thomas Reid, and Dugald Stewart in the United Kingdom, and by Etienne Condillac and Victor Cousin in France (O68). He called it "pretend science" and "illusory psychology, which is the last phase of theology" (O68). "There can be nothing like the scientific observation of the passions," he argued, "except from without" (O68). As well as being factually misleading, the problem with introspective human science was its lack of ability to produce consensus, due to its non-observability.

"After two thousand years of psychological pursuit, no one proposition is established to the satisfaction of its followers. They are divided, to this day, into a multitude of schools, still disputing about the very elements of their doctrine. This interior observation gives birth to almost as many theories as there are observers" (O69).

Only a scientific study of observable phenomena (that is, from a third-party perspective) is adequate to produce consensus and therefore be the basis for a political reorganization of society. Comte advocated for the abandonment of subjective internal experience (that is, first-person introspective psychology) in favour of an exclusive study of **externally observable**, objective phenomena (that is, knowledge accessible to a third-party perspective). Specifically, he promoted two positive scientific ways to study human affect and intellect: (a) the study of the biological organs that produce them, called "**phrenological** psychology," or (b) "the series of intellectual and moral acts" that are "their more or less immediate and more or less durable results," which corresponds to a behaviourist approach (H172-73).

Comte's positive science would also abandon the search for "the causes of phenomena," which was a hangover from the pre-positive, metaphysical tradition, and devote itself to "the study of [phenomena's] laws—that is, their invariable relations of successions and resemblance" (O67, AC26). He argued that "social phenomena are subject to natural laws, admitting of rational prevision" (O74). Discovering these laws by means of scientific experimentation was not possible, due to the high degree of interconnection of parts within a social system. The interconnection of parts "becomes closer and more marked in proportion to the complexity and diminished generality of the phenomena," and finds its maximal value in human social systems (O75). As a result, "any artificial disturbance of any social element must affect all the rest, according to the laws both of coexistence and succession; and the experiment would be deprived of all scientific value, through the impossibility of isolating either the conditions or the results of the phenomena" (O65, AC). Although experimentation was useless, the study of society could still be undertaken by the scientific method of observation of external phenomena. Specifically, one could examine "pathological" cases of social processes, such as political revolutions, or compare societies separated by time or space. In this way, the positive social scientist could uncover the universal laws of human social development. Comte stated in a letter to a friend his conviction that "there were laws governing the development of the human race as definite as those determining the fall of a stone" (H178).

Lecture 2: Saint-Simon

In addition to Comte, Saint-Simon had many disciples extending beyond the academy into business and politics, including: state administrators responsible for the building of the Suez Canal, Barthélemy Prosper Enfantin and Charles Joseph Lambert; Parliament Senator, Michel Chevalier; President of the Constituent National Assembly, Philippe Buchez; founder of the Crédit Lyonnais, Henri Germain; and founders of the Crédit Mobilier, Émile and Isaac Pereire. The influence of Saint-Simonian thought therefore extended far into French society.

Through the influence of Comte, Saint-Simonian scientism entered British thought. Comte's work was greatly admired by philosophers Harriet Martineau, J. S. Mill, and George Henry Lewes; and Herbert Spencer was heavily influenced by Comte, though he engaged with his work critically (H 187). In the UK, the two dominant modes of thought in the early-nineteenth century were the utilitarianism of Jeremy Bentham and his followers, and the classical political economy of Adam Smith, David Ricardo, and Thomas Robert Malthus (O 208). By mid-century, however, both had come under severe criticism—utilitarianism for its unrealistically static concept of human nature, and political economy for its narrow theory of human motivations as consisting in self-interested wealth acquisition (O 208). There was a general sense of the need for a new direction with which to cohere a scattered intellectual culture and provide a solid basis for beliefs and actions. In 1844, Lewes characterised the era as one of "universal anarchy of thought, with a strong desire for organization" but possessing "neither spiritual nor moral union" (O 210). Martineau, in 1853, characterized people at the time as being "adrift for want of anchorage for their convictions" (O210). And in essays initially published in 1867, Matthew Arnold claimed that the current state of confusion called out for "some sound order and authority" (O210). In this context, British intellectual and cultural thought took a great deal of influence from the promising positivism of Comte.

Martineau's translation of Comte's Positive Philosophy in 1853 undoubtedly did much to spread the influence of positivism in the United Kingdom. Her translation was praised by Comte himself as being a significant improvement on his own exposition. Her preface to the work was highly revealing in terms of the motivations that turned people towards positivism in the UK (and potentially elsewhere on the Continent) at this time. Citizens, she claimed were "alienated for ever from the kind of faith which sufficed for all" in previous periods, while no "ground of connection as firm and clear" was presenting itself instead. Expressing fear of the "moral dangers" of such a state of absence of grounds for convictions, she claimed,

"The work of M. Comte is unquestionably the greatest single effort that has been made to obviate this kind of danger; and my deep persuasion is that it will be found to retrieve a vast amount of wandering, of unsound speculation, of listless or reckless doubt, and of moral uncertainty and depression." V

Here we have a clear statement of the motivation for the turn towards scientism being based in moral uncertainty, in the hope that a positive social science, or political organization according to the knowledge revealed by the methods of the sciences would provide a solid basis for morality and solve the social problems associated with moral uncertainty. This work was explicitly translated "for students who are not schoolmen," making the work and theory of Comte accessible to members of all classes of society. She restated along Comtean lines "the futility of their method, and the worthlessness of the results" of forms of social and political theory that do not deal in externally observable, objective knowledge. Martineau also claims that positive science will be "as favourable to [a person's] moral discipline, as it is fresh and stimulating to his intellectual taste"—restating Comte's claim that moral needs and questions would be satisfied by the pursuit of positive science. The religious fervor with which positive science appealed to people can be read in Martineau's description of the possibilities of positive science:

Certainly, I can conceive of no instruction so favourable to aspiration as that which shows us how great are our faculties, how small our knowledge, how sublime the heights which we may hope to attain, and how boundless an infinity may be assumed to spread out beyond. We find here indications in passing of the evils we suffer from our low aims, our selfish passions, and our proud ignorance; and in contrast with them, animating displays of the beauty and glory of the everlasting laws, and of the sweet serenity, lofty courage, and noble resignation that are the natural consequence of pursuits so pure, and aims so true, as those of Positive Philosophy.

Evil, ignorance, and selfishness would be overcome by the objective dictums of positive science, the latter of which would carry us to the ideals of beauty, glory, serenity, courage, and nobility. Science was to "raise human hope and human effort to the highest attainable point." The replacement of other values by seeking scientific truths is explicit in Martineau's work. Once scientific truth-seeking was perfected, "the natural conscience, thus disciplined, will train up all other moral attributes to some equality with it." Positive science was "the only field of progress".

A mere twelve years later, J. S. Mill, also an admirer of Comte, composed a lengthy exposition and critique of Comte's entire corpus in 1865, in which he stated that in England

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Comte's positivism had already long been "of sufficient importance to induce almost all who now discuss the great problems of philosophy... to take what is termed the Positivist view of things into serious consideration, and define their own position, more or less friendly or hostile, in regard to it" (Mill 1-2). He stated similarly that "all French writers who adhere to the common philosophy, now feel it necessary to begin by fortifying their position against 'the Positivist school'" (Mill 2).