

PRINCIPIA POLITICA

Politics & Ethics under Scaling and Uncertainty

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INTRODUCTION



Figure 0.1: *Self organization: a flock of birds exhibiting swarm behavior.*



MOST OF THE TENSION resides between 1) embedded, uncertainty minded, multiscale fractal localism (politics correctly seen as an ecology/complex adaptive system), and 2) abstract one-dimensional universalists and monoculturalism (politics mistakenly seen as a top-down engineering project).

The above distinction becomes clear once we move away from the verbalistic, use nonlinear properties, uncertainty approaches, information theory, and probabilistic rigor to look at politics with the same eyes as when we examine highly dimensional inter-

"Right" vs. "left" is often incoherent; rigorous vs. unrigorous and effective vs. ineffective is a more accurate representation

Verbalism is very
general in areas still
mistaken for scholarly

active elements such as nature, biological systems, internet networks, and medical issues.

We provide precise definitions of verbalism and show how many political concepts fall under such a category. For instance the "left" vs. "right" distinction is something verbalistic and often incoherent –and that at many levels.

Scale, for many functions, matters more than the political regime.

The best way to summarize Fractal Localism (which we capitalize) is by its opposite: abstract universalism.

ORGANIZATION



THE BOOK is organized as follows. We introduce the Incerto project to link it to the current treatise. We then present general principles , followed by specific articles of conduct and general rules in the articles,. We have specific questions and answers in *Quaestiones*, Part [iii](#).

A structured summary of complexity and issues that differ from the common approaches to political philosophy is in the final section [3](#).



THE INCERTO (of which this is a part) can be summarized as follows: while there is a high uncertainty (and causal and probabilistic opacity) in the world, what to do about it –which option to take– is *always* certain.

Furthermore, paradoxically, the more uncertain the world's outcomes are, the more certain the optimal policy. It is the most prudent one with the most convex outcomes, that is, the one that, first, is precautionary and insures survival and, second, carries the most beneficial second order effects.

Uncertainty makes decisions straightforward

The idea is to (re)build political and economic systems based on axiomatic and derived principles that accommodate uncertainty and fragility:

The man of the system . seems to imagine that he can arrange the different members of a great society with as much ease as the hand arranges the different pieces upon a chess-board. He does not consider that the pieces upon the chess-board have no other principle of motion besides that which the hand impresses upon them; but that, in the great chess-board of human society, every single piece has a principle of motion of its own, altogether different from that which the legislature might chuse to impress upon it. Adam Smith, *The Theory of Moral Sentiments*.

- 1) Dynamic, never static (i.e. no analysis designed for single period should ever be used dynamically)
- 2) Multiscale, never single scale (i.e. no interpretation should extend beyond the scale for which it was designed)
- 3) Precautionary at higher scale, i.e. the business of the state is what risk management and control that cannot be done at lower levels.

The state should not be like an intrusive Lebanese mother, rather like a rich Lebanese uncle to help when needed.

Absence of information is, simply, uncertainty. As an example, if you are *unsure* about the reliability of the airline, you drive or take the train; if you *do not know* whether the water is poisonous or not, you just avoid drinking it. Many modelers fail to realize that model uncertainty and disagreements about, say, a certain policy, is itself potent information that command the maximally prudent route.

As an application to climate change: the most contradictory the models, and the wider the gap between their results, the more uncertainty in the system which calls for precaution, even if one disagrees with the models.

Contra and Limitations

There is a tension between the *ex post* Anglo-Saxon common law based on torts (see *Skin in the Game*) and the regulatory framework *ex ante* required for precautionary action (since harm was not done). The solution proposed in [16] is to limit such action to systemic ills that the tort system is incapable of handling.

In a way it is no different from military protection.

At a higher level, it means to insure ergodicity.

Part I

PRINCIPLES

1

SCALABILITY



PRINCIPLE 1 Never describe, compare, or assess the effectiveness of political systems without reference to scale.

Everything nonlinear has a scaling problem; responses are either locally convex or concave



RACTAL LOCALISM: Between the concrete individual and the abstract collective there are a certain number of **tangible** fractal gradations.

Scaling and dynamics are missed in the verbalistic literature

An immediate implication:



OLITICS is not scale-free. One can be "libertarian at the federal level, Republican at the state level, Democrat at the county level, socialist within the commune, and communist at the family and tribe level."

To understand localism: on August 6, 1806 the Holy Roman Empire was abolished. "Goethe noted that day that the people staying in the same inn as him were far more interested in the quarrel between their coachman and the innkeeper than in its demise." [7].

Minorities are choked in centralized systems

The supply of "international" news diverts from the municipal nature of interests.

Nationalism vs Globalism The conflict "nationalism" vs "globalism" is ill defined. Both ignore fractal strata under monolithic absorbing concepts.

Anarchy is not scalable. Localism is.

More technically, groups are never one (you) or infinity (mankind plus living things), but renormalize into clusters of intermediate sizes.

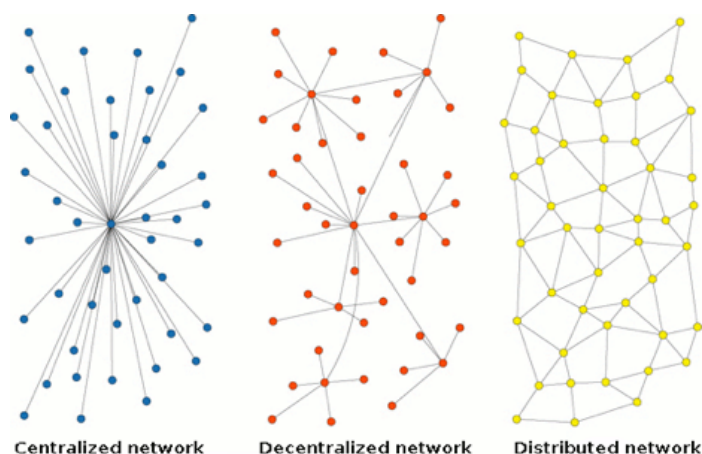


Figure 1.1: *Networks. To the left is a central government (even if it composed of many factions), to the right is the initial behavior of leaderless movements. At the center is a Barabasi and Albert scale-free network.*

Interactions are local at different hierarchies. No local interaction should be superseded by command and control guidance. It is easier to gauge micro-performance than macro-performance, particularly to the visibility of some side effects and the more limited percolation of the local.



LOCALISM as proposed is not a political system but a rigorously defined political structure that can accommodate various systems, which can even include communism, libertarianism –though not anarchism as naively presented. The main aim is to fit the dynamics to the proper scale.

Hence this is not a discussion on localism but rather one on scale.

The fragility interpretation Scalability is a simple property of an object that has a concave or convex response. For instance an elephant has more fragility than a mouse for an equivalent proportional random shock. See further down and in *Antifragile* [13].

Scale and Nonlinearity The impossibility of comparing two items of different size without scale transformation is illustrated as follows. Take a human and increase his or her size. Contact with the floor would grow by squares, while the volume is cubic, therefore

increasing the pressure on the bone architecture. The compensation would change the shape of the limbs. Few realize that, unlike in the movies, a "giant" human would end up having to look like an elephant –and a tiny human would look like an ant.

Scaling and the individual Libertarianism is ill defined since, as we saw in the central vignette on fractal localism, it does not take into account the renormalization into groups.

Renormalization and Minority Rules Thanks to the mechanism of renormalization, an open universalist system, that is, built on nonfractal structures (without layering), will be taken over by the intolerant asymmetric minority.

Furthermore a centralized space with non-intolerant non-asymmetric minorities will be taken over by the majority. (Tocqueville's point in favor of federalism).



LOCAL VILLAGE There is convexity to localism as follows: you build stronger bonds overall in meeting a person five times than in meeting five people once.

This illustrates the impossibility of a global village.

Biologists and just so stories Many inferences about ancestral conditions miss scaling, and the *mean-field problem* (appendix) plagues evolutionary biology and psychology: a raw average is not a function of an average. Here we can see it in its clearest and mildest form in the following. A reader wrote: "One of the things that upset me as a primatologist is that experts on bonobos will describe how a small group of apes make sure everyone in the group is fed, and then they use this to suggest socialism, when they do not realize the group is more akin to a family than a society. They ignore scale completely."

Contra and Limitations

One cannot compare scales across heterogeneous items. A scale for restaurants and land animals differs from the one for distribution of houses and marine mammals.

Scale is something gauged empirically, based on convexity effects.

Technology facilitates the state's grip on society

One person to a future spouse: "I will deal with silly and insignificant mundane matters: where to live, what and when to eat, where to shop, what to buy, where to educate the children, where to go on vacation, etc. You will focus on centrally important and vital questions: geopolitical relations, tensions with Russia, the future of technology, space travel, and such indispensable matters." Let the State do the *important* things...

Further Comments There are potent arguments that the fragmentation of what were then German states and statelings led to Napoleonic, then Prussian dominance. But dominance needs to be defined: whether it is integration in a nation state (France, Bismark's Germany) or some vassal condition.



CENTRALIZATION takes away from governance and democracy owing to the concentration of signals.

These arguments miss the fact that –no matter the regime – central states had at that time a very limited reach over citizens owing to reduced communications. The involvement of the states in the 1900s was (across the world) an order of magnitude lower than today's, as measured by the share of GDP coming from the central government –and limited to armed forces. Some European countries had 5-10% of GDP controlled by the government, most are now at 50-70%.

Centralization By the argument of fitness to current time, centralization can show immediate benefits. But these wane as the signal from the environment gets dulled.

Mechanisms of interaction are muted by dominant signals.

Further Comments

Note that centralization will necessarily show success in its early stages of implementation.

A Lebanese fellow said, criticizing my hyper localism: "but there is a lot of corruption within municipalities". Answer: "Corruption shows very easily within municipalities"

The only places where communism has been relatively successful are the Kibbutz, Moshav, and similar tiny communes

2

COERCION AND NUDGING



PRINCIPLE 2 No entity, governmental or otherwise, should be able to coerce an individual into a political and economic system against her or his will.

In return the individual must reciprocate.



UDGING and any form of creepy intervention violates a person individual's rights.

Thanks to nationalism, people are coerced into an ethnocultural identity that's not the one they would normally choose.



UDGING individuals violates scaling rules. The result on the collective might not translate, as discussed with the scaling of morality.

Individual rights: the liberties of each individual to pursue life and goals without interference from other individuals, groups, established monocultures, or the government.

See the section 8 on how morality does not aggregate.

In economic terms, consider the rationality of investing in the stock market "in a diversified way" assuming we start initially at period t when it is deemed safe and low-risk. Then everyone having a diversified portfolio will cause the various formerly independent stocks to now move in locksteps.

For instance, nudging people into investing their retirement savings into basket strategies might be beneficial for a single individual taken in isolation, but will not translate into benefits for the collective –it will remove the effects of diversification.

**PRINCIPLE (Isocrates)**

Powerful countries need to apply the silver rule in foreign affairs by treating weaker ones the way they would like to be treated if the roles were reversed.

The idea is to propose the broadest political system possible.

Nudging assumes the nudger knows and takes responsibilities which violates Principle 13 on risk asymmetries and skin in the game.

Nudgers have been actively opposed to skin in the game.

Commentary

Avoid golden rules (a la neocons). Golden rules ("treat others the way you'd like to be treated") invite busybodies to change other people's lives, while silver rules ("don't treat others the way you wouldn't like to be treated") is more robust. Silver rules require skin in the game (cf pple), though necessary but not sufficient.

Contra

Exceptions (François Benoux) in the tails of the distributions:

- seat belts
- taxation (mandatory)
- bioethics (can't sell my own kidney if I wanted)
- education (children coerced to learn even in homeschooling)
- army (in war to defend nation)
- treatments (e.g. drug addicts)
- jury duty (mandatory)



Figure 2.1: To understand Isocrates' rule for international affairs from multiscale localism, keep scaling the notion up.

3

SCALABILITY AND ETHICS



PRECAUTIONARY decisions do not scale. Collective safety may require excessive individual risk avoidance, even if it conflicts with an individual's own interests and benefits. It may require an individual to worry about risks that are comparatively insignificant.

Assume a risk of a multiplicative viral epidemic, still in its early stages. The risk for an individual to catch the virus is very low, lower than other ailments. It is therefore "irrational" to panic (react immediately and as a priority). But if she or he does not panic and act in an ultra-conservative manner, they will contribute to the spread of the virus and it will become a severe source of systemic harm.

Hence one must "panic" individually (i.e., produce what seems to an exaggerated response) in order to avoid systemic problems, even where the immediate individual payoff does not appear to warrant it.

This happens when the systemic risk is small to the individual but common to all, while an individual's other idiosyncratic risks dominate her or his own life. The risk of car accident may be greater for an individual, but smaller for society.

Under such conditions it becomes selfish, even psychopathic, to act according to what is called "rational" behavior – to make one's own immediate rankings of risk conflict with those of society, even generate risks for society. This is similar to other tragedies of the common, except that there is life and death.

You are harming others by not "overreacting"

In short you will end up harming yourself by ignoring these "irrational" risks

Precaution scales in a convex way for cross-dependent small idiosyncratic risks that end up dynamically extremely large at the systemic level.

In addition, there is a tradeoff short-term vs. long term for idiosyncratic risk. Over the long run, there is convergence between idiosyncratic and systemic: your risk rises if all others are infected and the risks of survival from other diseases drop.

For instance, during a pandemic that mostly spares young, healthy individuals, an independent emergency that would typically be routine may become untreatable because of lack of resources. Further, in conditions of severe societal breakdown, many additional risks will emerge for all agents that can't be reduced to the initial short term risk of infection to the individual.

In the current COVID-19 outbreak, such effects can be observed by a complete inundation of hospitals and their ICUs as local outbreaks take hold. This and other less visible thresholds change the dynamic of the pandemic as they are exceeded. Initially small risks become amplified and produce novel and unanticipated risks as the contagion makes impacts system-wide.

For these reasons, the prudent and *ethical* course of action for all individuals is to enact systemic precaution at the individual and local scale. The breakdown of scale-separation that a multiplicative contagion induces connects the individual to the collective, making everyone both a potential bearer and source of risk.

Commentary

Example: John Ioannidis found out that the odds for an elderly to die on the road exceeds that from Covid-19 (the statistical claim was effectively wrong, but let's ignore). Consider a collective, that is a sum of individuals. Because deaths on the road are independent (hence allow for the workings of CLT, the central limit theorem) and the ones from Covid dependent (hence do not scale by CLT), you witness a reversal of the source of risk. How? The odds of a 100 elderly dying from Covid exceed the odds of the same number dying in car accident, even if one person is individually more likely to die on the road.

Further Comments

This explains the classical problem that skills in treating individuals (say, doctors) does not lead to understanding the risk of tail events.

Additional Comments

There is a severe problem with rationality defined as individual trade-offs; it does not aggregate to collective rationality. The reverse is also true: collective rationality is not reached via individual one. As we saw, it is a good idea to ensure a high savings rate in the population and enforce diversity of investments ; but "nudging" individuals into diversifying is counterproductive because it increases co-movements between the aggregates and make the tail risks of various previously independent markets co-dependent.

4

GREEK VS ROMAN



PRINCIPLE 4 The main differences between political attitudes should be judged in terms of effectiveness, never intentions. The real difference in politics isn't the "right" vs "left" verbalistic gradation but rather "Greek" vs

"Roman".

"Greek": puts theory above practice.

"Roman": puts practice above theory.

Clearly this is a metaphor for intentions vs. results not an ethnographic statement (in fact Byzantines were deliberately "Roman" in that, as well as many other, senses of the word). It is inspired from the fact that the Romans got their political system by tinkering, not by "reason". Polybius in his Histories compares the Greek legislator Lycurgus who constructed his political system while "untaught by adversity", to the more experiential Romans who, a few centuries later, "have not reached it by any process of reasoning [emphasis mine], but by the discipline of many struggles and troubles, and always choosing the best by the light of the experience gained in disaster" (Plutarch).



NEVER judge a policy by its intentions or the reasoning behind it, except for the application of the precautionary principle.

Other inspirations: the episode when Cato the elder sent Greek philosophers packing; Plato's disastrous chance at governing in Sicily; the Republic, perhaps what Popper deemed the most destructive book ever owing to Plato's intellectual brilliance. Note

When people go to the dentist, they judge by results never by intention. However this reverses when it comes to politics. It remains however that for risky decisions naive assessment of results fail to capture the quality of the decision.

that Anglo-Saxon common law would be the best idea of a self-correcting model.

Background

The difference goes deeper; it has much to do with both teleology and acceptance of opacity. The "Greek" assumes that the fact that I) *there is a cause to things* immediately implies that II) *such cause is visible to them*, without making a link between I and II.

Contra and Limitations

Accepting the interactive and local behavior of complex systems doesn't mean raising one's hand and stepping aside completely. It means the following: priority must be first given to the self-organizing attributes, which is not exclusive.

Under opacity the focus is on the unknown, not the known. Complex systems have survived, which is potent statistical and phenomenological information (see further with the discussion on ergodicity).

People have a hard time shedding socialism because it makes a lot of sense and appeals to our deep sense of justice. What makes a lot of sense, historically, doesn't really make a lot of sense; the fact is obvious but hard to remember when swayed by abstract justice arguments. Consider modern Northern European monarchies, particularly the Scandinavian ones—they offer the highest degree of governance.

The reason the state should not act like a Lebanese mother is that often in engineering results are unexpected side effects of the process. "Rational" outcomes do not necessarily flow out of "rational" process (the teleological fallacy).

5

LIBERTY MUST BE SCALE INVARIANT.



PRINCIPLE 5 Liberty is fractal; it should be exercised to all collective units at all scales, that is, communities qua communities, all the way from $n = 1$ to $n = \infty$, with minimal scale transformation.

An individual is free under constraints; so should his or her community under different constraints. We have moral revulsion at states of serfdom; none for tribes in similar situations. Some entities try even to eradicate collective "identities".

Liberty requires coherence across scales

Commentary

This fractalization allows an intellectual bridge between localism and libertarianism; rather shows how libertarianism implies localism but not necessarily the reverse. It is inconsistent to allow an individual a certain degree of freedom, but not fractalize it to groups of individuals constituting a political unit. It is even more inconsistent to allow an economic entity, say a corporation, the same freedom and almost similar rights as individuals, but not do so to political units. Tribes should be free under the condition that they accommodate the freedom of other tribes.

Contra and Limitations

The right to secede is a problem if it entails violations of commitments, and carry side effects, but such a right remains inviolable, just as individuals should have the right to change citizenship.

6

PROGRESSIVE VS CONSERVATIVE



PRINCIPLE 6 Never use terms such as progressive or conservative without reference to a specifically stated rate of change.



PROGRESSIVE and conservative are ill defined terms, verbalistic labels. It is required to specify a rate of change for every specific domain.

Rationally progressive means embracing progress by accepting a certain rate of change deemed optimal. Too high a rate of change cancels the gains from previous mutations; while too slow a change leads to misfitness.

The designations "conservative" or "progressive" are meaningless in that sense. Both may just want progress at different speed and lose context under gargling verbalism and ill-defined terms. This is one instance where the distinction "left" vs. "right" is verbalistic, obsolete, and downright silly. Consider that too fast a rate of change leads, simply, to regression. The concept of "ratcheting up" (that is, locking up at a new state deemed preferable to the previous one) is developed in *Antifragile*. The speed of change is a direct function of the fragility of the system. Aquinas: "a blind horse should be slow" (via R. Read).

Note the metaphor: driving at 600 mph is certainly never the *fastest* way to get somewhere.

Compare Popper's utopian engineer to the piecemeal engineer, in the *Open Society*[6], Vol I.

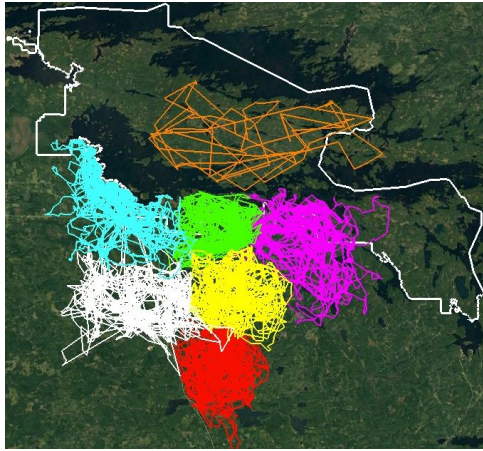


Figure 6.1: Movement of packs of wolves over the summer of 2018. *Voyageurs Wolf Project, h/t Gore Burnelli. These wolves speak the same language and have the same religion. Yet, there are separable entities.*

Background

There was a time where "conservative" was, owing to verbalism, considered backward, represented as resisting *all* progress. Hayek had to go out of his way to separate himself from conservatives in his *Why I am not a Conservative* [5], prompting a chain of such denial of guilt, with Buchanan's *Why I too am not a Conservative* [2]. All these discussions are grounded in lack of sophistication in complexity, and misunderstanding of the relation between speed and fragility or, more generally, the notion of tail risk in interactive systems.

Contra and Limitations

It is hard to assess if a new state is "better" than the previous one without relying on specific metrics and systems of value; such metrics can be (as has been the problem with metrics) incomplete and easily gamed.

7

MORALITY DOES NOT AGGREGATE

Non-aggregative properties of morality and so-called pursuits of truth.



PRINCIPLE 7 Group morality is not the sum of individual morality.

Never make moral inferences about an aggregate or a group from attributes of individual members and vice versa. Under adequate legal and institutional structure, the intentions and morality of individual agents does not aggregate to groups. And the reverse: attributes of groups do not map to those of agents.

The standard mechanism is well grasped: competition makes prices adequate by pushing them towards the margin; price formation has nothing to do with the individual intentions of agents. But it is the second step, the wedge between intentions and outcomes, and, more generally, scale transformation, that is not generalized. It is easy to get that the reintroduction of predators such as wolves in the U.S. and Europe would lead to the flourishing of other species, by the logic of interactions and scales. Translating that into socioeconomic life appears to be hard.

Commentary

Mandeville argued (correctly) that "vices" in the Christian sense, such as the desire for luxury, represent fuel for economic activity. Consider that by buying expensive perfume to satisfy your vanity, you help pull people out of poverty. It is accepted that capitalism has, as of the time of writing, pulled a billion people

Science is not a sum of scientists, rather the tail.

out of poverty, nearly eliminated childhood mortality, increased the life expectancy of people in places where sanitary conditions made it dire, etc. But the next step, "by whom", is rarely evoked. There is neutralization at the group level.

Note that people live under the illusion that if science works in getting us closer to truth, it is the result of the fact that on balance individual scientists are attempting to get us closer to truth. This is clearly false under scale transformation; it is similar to the aggregative properties of markets: scientists might be just trying to pursue self-interest and it is the rules that allow the truth to progress *inspite* of the attributes of the individuals.

Contra and Limitations

Make a distinction between vices that harm the agent and those that harm others. One may hold high standards for private virtue. But it is inconsistent to use the argument of such morality on grounds of public good unless one can also accept absence of scale transformation.

Adam Smith rejected Mandeville's focus on vice (replacing it with the milder self-interest) but nevertheless seems to have taken the idea of scale transformation from him –as reflected in his famous quote: "It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest."



NE DOES not necessarily build a virtuous political system with virtuous agents. Likewise a collection of malicious agents can produce a virtuous system.

Sometimes we get the reverse, sayings about good people collectively bad: *Senatores boni viri senatus mala bestia* (Senators are good people, but the Senate is a bad animal), falsely attributed to Cicero.

8

NONNAIVE UNIVERSALISM



PRINCIPLE 8 Never conflate localism with monolithic, absorbing nationalism.

Commentary

Intuitively, people do better (to the least, act differently) as floor-mates than roommates. Any idiot realizes that in his or her own life but misses the point when it comes to political systems. This is best illustrated by either Phoenician-style (non-Punic) decentralized localism or the fractalism of Switzerland.



KANT'S NAIVE universalism consists in the elimination of context to build a stripped-down, naive, static, low-dimensional object out of a rich, fractal, dynamic, interactive structure.

Some things generalize and are scale free (morals, rights), others don't and remain scale-dependent (nature of relations).

Background

There has been notions of "nationalism" retroactively flown back into earlier time, when polities were organized as a triad: 1) empires under a king promoted into the rank "emperor", 2) nations under a king not yet promoted to the rank of emperor and therefore often depending on one, and 3) city-states (usually maritime

and mercantile: Mediterranean or Hanseatic) and statelings (usually agrarian), both necessarily vassalized.

Nationalism in the modern sense seems to correspond to tribal structures grouped under some royal authority —thus nationalism is exactly what is not fractal, that is, monolithic, and aims at eliminating fractal layering.

The danger of monolithic nationalism, that is, non-fractal tribalism, is that it creates collectives vastly more biased and xenophobic than the sum of individuals. See the comment in [14] on how Polish antisemitism was more of a collective than an individual phenomenon.



OROLLARY (Survival and Tribal Commitments)

Collective survival necessitates a minimum level of fractal tribalism, though tribes don't necessarily mean related people.

Commentary

Fughedabout Kant...
The general and the
abstract tend to attract
self-righteous psy-
chopaths.

Tribes can be composed of nonrelatives as, say in the military, where people take the bullet for their friends and co-fighters, not a particular cause.

Nobody has managed to prove that abstract (particularly Kantian) universalism can ensure intergenerational survival.

The saying *if you are friends with everyone, you are nobody's friend*. And if you treat all mankind the same, in other words without some preferential treatment to your own children, you will turn out to be an unreliable parent —eventually threatening their own survival. Pure universalism at its *ad absurdum* limit implies you drop off a kid at school in the morning and randomly pick another in the afternoon.

The rules of societal symmetry cannot hold without some structure: *you form a group with your own family; I form one with my own*. This renormalizes to tribes that can be as self-defined as needed. The mechanism is convexity. You do better protecting your child with intensity 1 than protecting 1000 children with intensity $\frac{1}{1000}$.

Recall that Byzantine theology was at least partly driven by competition between partisans of rival teams (blue and green) in chariot races.

Background

Yoram Hazony detected the necessity of tribal fractality (not his words): society can only work under such structures that have switching in-group vs. out-group behavior: "Me and my brother against my cousin; me, my brother and cousin against the outsider", etc. (Note that this should not lead to "Nationalism" that by definition wants to eradicate lower layers: Hitler's idea is a German monolithic entity that absorbs all what's perceived to be its regional subparts). What we did here is embed it in a convexity argument, the refusal of the defective simplification via mean-field.

Further Comments

Unruly Mediterranean mountain tribes that managed to resist invaders (e.g. Sicily, Crete, Mount Lebanon, Corsica) often have a tradition of local vendettas that are suspended whenever an outside threat emerges. One can argue that such *fractal* vendettas are mere training programs and exercises in vigilance (An antifragility argument).

9

RACISM, HOMOPHILY, & XENOPHOBIA



DEFINITION: Racism vs. Xenophobia. Racism has two conditions: 1) imparting population attributes to randomly selected individuals or sub-groups from such a population; that is, in the association of **abilities**, personality traits, and disposition with ethnicities and classification.

It leads to treating a person with presumed population traits rather than the idiosyncratic ones (that is, top down vs bottom up).

2) holding the belief that such presumed population traits and dispositions are inferior to one's own.

Homophily consists in preferring people similar to one-self for social or cultural purposes, though not political, economic, or functional ones (where its pathology becomes nepotism).

Xenophobia consists in pathological homophily, disliking strangers *qua* strangers.

It is very common to conflate differences between groups and difference between individuals.

You should not say "a 53 year old African-American" or, worse, "person of color" but rather, simply "Joe". The less background information, the more you are dealing with him as a human. And the more universals you bring into a situation, the more violations of scalability.

Notice how this racial focus can be absurd: you do not hire someone of a specific origin for a specific function: one does not hire an Ethiopian for long distance running and a Scandinavian

for weightlifting cars: you hire the person with the required abilities and there will be an ex post correlation.

Commentary

Giving favorable treatment or inheritance to a relative or a family member cannot be considered racism although the link with that person is primarily genetic, particularly if the person is recently discovered half sibling. On the other hand claiming to be giving such favorable treatment "because of skills" is racist and eugenicist. Granting a French citizenship to a newborn issue of French parents in Mongolia while not doing so with other babies in the same hospital is not racist. Claiming to be doing so because of French ethnic superiority is.

Background

The strategy to degrade groups' intergenerational genetic endowment, as represented by the activism of Charles Murray's (co-author of the statistically flawed *The Bell Curve* and the fake research *Human Accomplishment* –as busted by this author) under tame designations (or the elevations of some groups as the BS vendor Stephen Pinker did with Ashkenazis, attributing to them unique genetic traits) is clearly racist, particularly since the arguments repose on fake statistical associations and ignorance of probability. While low-dimensional traits are heritable (height, skin pigmentation, etc.), a higher dimensional composition of these has not been shown to be so.

Simply, a nonlinear function of x is statistically removed from x . The author has shown where IQ scores (which are claimed to be heritable) are only good at predicting testing abilities (or special needs) –though they don't fully correlate for the very same person – and are marred with severe nonlinearities that overestimate "correlation".

Racism is misapplication of the a law of large numbers

Much of the "centrist" positivist movement in addition to being eugenicists, are ignorant of probabilistic inference: statistics is not a tool for verificationist scientism and confirmatory empiricism, but a method to not be *fooled by randomness*.

If (i) abilities are environment dependent (a Maserati optimized for a race course will not fare well in the Corsican mountains, compared to a goat) and (ii) the environment is not predictable, one needs a measure that predicts both output *and* environment. It is hard to figure out why some people are much better house

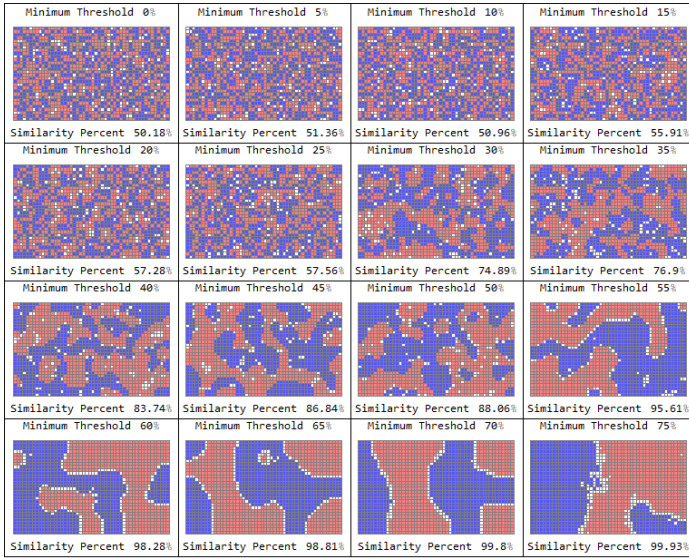


Figure 9.1: The mechanism of aggregation of individual preferences. There are two tribes, the red and the blue; each square is occupied by individuals or empty (left in white). Each person has a preference of not being in the minority, expressed as the minimum threshold $x\%$ of people of the same tribe they would like to have as neighbors. We start by allocating people randomly on the map, and they move if their preferences are not met –cellular automata algorithms makes people move in locksteps until we converge to the standstill composition (or close to it), where (almost) nobody is motivated to move as all preferences are met. We can see how non-xenophobic individual people with a weak preference of not being in the minority create segregated neighborhoods. There is a compounding effect of preferences on the neighborhood. A minimum preference of 40% produces clearly segregated neighborhoods. Credit: Diego Zviovich

It is mathematically impossible to prove the heritability of higher dimensional traits

painters than carpenters –things break down under nonlinearities.

Finally, scaling prevents transferring intelligence from individuals to groups, and vice versa. Development and cultural formations are functions of collective not individual contributions –ethics are driven by minority rules not aggregation of personal preferences.

Joe Norman: "Because they've understood something about evolution, that it involves inheritance, they believe they should be able to reduce every complex trait of a human being down to a neat-narrativized story of inheritance problems (...) when we realize our most complex traits arise out of interactions, and are not reducible to more directly-heritable sub-systems or modules – even the interactions of traits between just two people (parents) leads to very-difficult-to-predict emergent outcomes."



PRINCIPLE 9A (CHROMOCLASSIFICATION) Tagging people with top-down classifications and "identities" that stifle the idiosyncratic attributes of the individual is fundamentally racist. Chromo-categorization using terms like "white" and "PoC" (people of color) is fundamentally racist and inspired by colonial classifications—even when used by the "left". White is indicator of purity, not race. Someone partially white is generally not classified as white in Anglo-Saxon dominated countries.

In addition, chromatic classification on a scale with "white" and "black" is necessarily ordinal and hierarchical; geographical one do not.

The "left" tends to use the same language and frame problems in the same way as the "right"

When people of Northern European ancestry talk dismissively about "whiteness", they are practicing second order racism, implying some superiority in the process and patronizing other classes of people.



THE NONELEPHANT ANIMALS problem (or "Mary Beard Problem") consists in creating classifications with "other", classifying people with reference to a class that has an implied referential purity to it. In the Mary Beard story, Romans were not "others" but Mediterraneans from outside what is now the European Union fell anachronistically under the "others" tag, when these people were much closer to the Romans than to the native English.

It is more rigorous to use "Nordic supremacy" in place of "White supremacy"



PRINCIPLE 9B Never mistake homophily for xenophobia. A weak form of homophily (preference for similar people) is not to be confused with xenophobia (distaste of the foreigner), even if it undergoes a collective scale transformation and looks like outright segregation. But there do exist various forms of xenophobia.

Example

A collection (Southern) Italian Americans with a weak preference of living within reach of Italian grocery stores will end up creating what looks like a segregated neighborhood, without anyone having any preference to exclude others from it.

Commentary

A group of people with a very weak preference of not being in the very small minority produces clustering and what may seem segregation may be just negative preferences (the desire to *not be* alone). See Thomas Schelling's argument [10] developed by cellular automata. There is a standard scale transformation from micro decisions to "macrobehavior", asymmetric to the transformations in the opposite direction. One can generate numerous situations of scale transformations via minority rules.

Contra and Limitations

This does not mean that every nearly homogeneous neighborhood is the result of the nonlinearity of the aggregation of collective preferences: some fundamentalists in hyper-monotheistic religions actively exclude others on religious grounds (e.g. Salafis in some neighborhoods of Tripoli, Lebanon).



OROLLARY: Groups and Individuals. An attitude towards groups is never the same as one towards individuals. All preferences are scale dependent.

Some people are crusading bigoteers against racism but have never invited a minority cab driver for tea. Indeed this is common as theoretical anti-racist stances constitutes a cheap exhibition of virtue. And in reverse: some people deemed extremely "racist" against a certain group *qua* group may in person marry a person of the group without seeing any inconsistency.

Examples

Arab tribes typically exhibit excessive hospitality towards individual strangers that venture into their territory, but slaughter marauding groups. So would that be, nonracism for $n < 5$ or so, racism for $n > 5$? For which $k : n > k$ are you racist? Practically nothing is scale-free.

Further comments

The defeat of stereotyping is that an individual may belong to more than one group. Further we may be oblivious to some op-

pressed groups: an unattractive person (in looks) suffers more than a person of the wrong race in the midst of the most racist crowd.)

Implication of no variance

10

NEITHER MINORITY NOR MAJORITY RULES



PRINCIPLE 10 Neither the minority nor the majority should be able to impose their preferences on others.

The general principle is no coercion of individuals by a given collective.

Commentary

It is clearly unreasonable that geographically distributed communities that represent .1% of the population impose their preferences on others, particularly when there is a high cost to that, and no ethical requirement or symmetry. But it is necessary that these individuals be treated with the proper amount of fairness. Just as Tocqueville praised the U.S. federalism and constitutionalism as a counter to the domination of the majority; one needs structures that can prevent excessive over-reach by the intransigent minority. Having local not global laws prevents renormalization. The electoral college prevents (among other things) minority rules. The United States, one needs to be reminded, is not a republic but a federation.

Commentary

An expansion to the concept "leave me alone and, in return, I will leave you alone".

Background



RINCIPLE Government as precautionary entity The government's role is survival and ruin avoidance –tail risks. Hence, necessarily, ergodicity.

Commentary

Via negativa is discussed in *Antifragile*. Its main property is the avoidance of iatrogenics.

11

WAR AND PEACE FROM THE BOTTOM



PRINCIPLE 11 War and Peace] Top down conflicts have different properties from local ones, and different resolution methods.

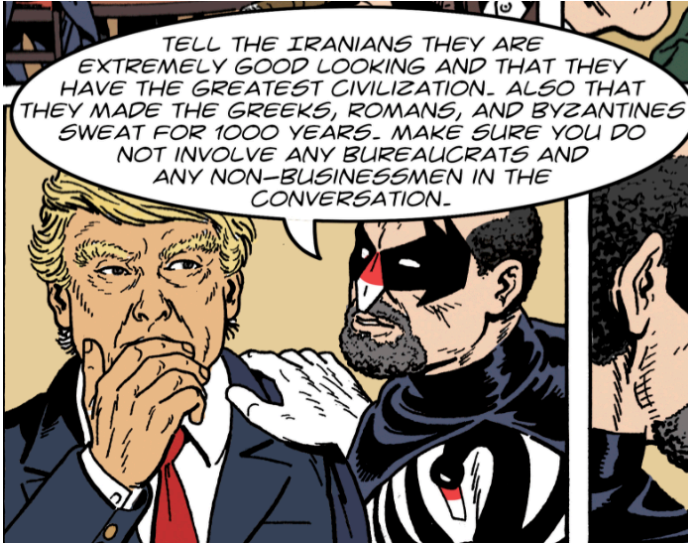


Figure 11.1: No bureaucrats should be involved in peace discussions without, of course, some supervision by businessmen and more adapted people.

Corollary 11.1 (No Bureaucrats in Peace Negotiations)

No bureaucrat should ever be involved in peace negotiations without the presence of businesspeople.



PROLOGUE: [Peace from the Top] Peace from the top works if and only if war is from the top.

The Palestinian Israeli disputes and anti-localism

12

PRECAUTIONARY GOVERNMENT



THE GENERAL (non-naive) precautionary principle [16] delineates conditions where actions must be taken to reduce risk of ruin, and traditional cost-benefit analyses must not be used. These are ruin problems where, over time, exposure to tail events leads to a certain eventual extinction.

While there is a very high probability for humanity surviving a single such event, *over time*, there is eventually zero probability of surviving repeated exposures to such events. While repeated risks can be taken by individuals with a limited life expectancy, ruin exposures must never be taken at the systemic and collective level. In technical terms, the precautionary principle applies when traditional statistical averages are invalid because risks are not ergodic.



PRINCIPLE 12 The central government principal role is precautionary, according to the non-naive precautionary principle, and limited to tail events.



PRECAUTIONARY decisions do not scale. Collective safety may require excessive individual risk avoidance, even if it conflicts with an individual's own interests and benefits. It may require an individual to worry about risks that are comparatively insignificant.

Assume a risk of a multiplicative viral epidemic, still in its early stages. The risk for an individual to catch the virus, is very low,

lower than other ailments. It is therefore "irrational" to panic. But if she or he does not panic and act in an ultra-conservative manner, the virus will spread and it will become a severe source of risk.

Hence one must panic individually in order to avoid systemic problems.

This happens when the systemic risk is small but common to all, while an individual's other risks dominate her or his own life. The risk of car accident may be greater for an individual, but smaller for society.

In a way it becomes selfish to act according to what is called "rationally" –to put one's own rankings above those of society.

Similar to the paradox of thrift.

13

RISK ASYMMETRIES



PRINCIPLE 13 Risk asymmetries (Multiscale)
No risk asymmetries should be present in the system: every single person and every single entity needs to have skin in the game.

Modernizing Hammurabi's rule.

Background

The Generalized Bob Rubin Trade (GBRT) is named after Robert Rubin, a rent-seeker who was boss of the U.S. Treasury then subsequently worked for Citibank where he collected \$120 million or so in compensation over a decade preceding the crash of 2008-2009. Owing to Rubin and other's policies or building hidden risk (low probability of blowup, high impact from blowup), Citibank was insolvent, bailed out by the taxpayer. But Rubin kept his \$120 million. This compensation arbitrage is what Hammurabi's article was meant to solve by making people accountable so they cannot hide delayed risks.



NO DECISION should ever be taken by someone who does not exit the pool in case he or she is wrong.

This is a case of filtering, not just incentives and disincentives. See *Skin in the Game*.

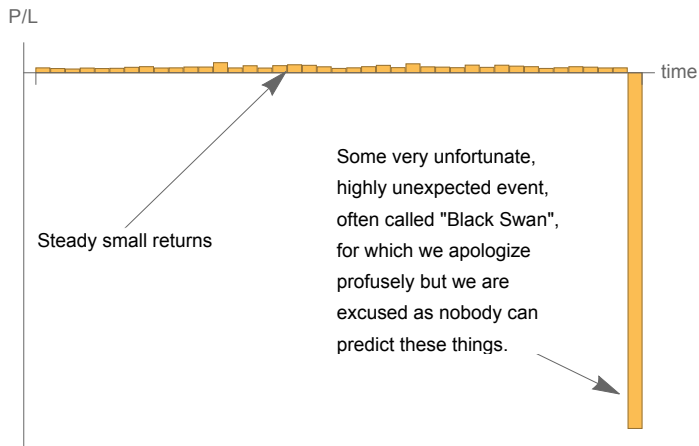


Figure 13.1: *The Generalized Bob Rubin Trade (GBRT): losses are unwittingly paid by the taxpayer ignorant of the dynamics.*

14

GOVERNANCE VS DEMOCRACY



PRINCIPLE 14 Governance, not just democracy, is the objective function –democracy can be gamed.

Commentary

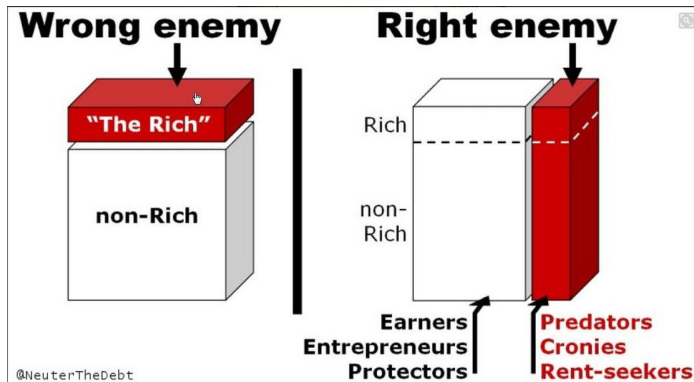


Figure 14.1: Rent seeking: attributed to Steve Conover

15

ERGODICITY



PRINCIPLE 15 Ergodicity. No static analysis for dynamic processes, particularly those that depend on absence of ruin.

Inequality should never be measured statically

Commentary

The payoff over time for one unit is different probabilistically from the multi-world scenario approach as it has been shown [17] that the law of large numbers operates differently, particularly under the situation of an absorbing barrier.

16

NATURE AND SIGNIFICANCE



PRINCIPLE 16 (Nature and Statistical Significance)

Never invoke evidence of absence for non-natural introductions and technologies; never invoke absence of evidence for natural things.]

What Mother Nature does is rigorous until proven otherwise; what humans and science do is flawed until proven otherwise.

This should feed the precautionary principle

17

HISTORICAL NARRATIVES AND AGENCY



PRINCIPLE 17 No historical study or account should be considered without filling-in the gaps of non-events, or events that do not reflect the agency of some top-down ruler or "leader".

Peace is boring. Historical accounts are, by their very structure, biased to overestimate agency in human affairs (such as the role of "leaders" and the "state"), as well as conflicts dealt with from the top, as well as the devaluation of the properties of the system.

By their very focus on wars, historians see history as wars punctuated with episodes of peace, not peace punctuated with episodes of war. This misfocus increase representativeness, exaggerates the role of meetings, decisions, and recorded "events". By their very definition recorded events are not random samples but glorifications of salient happenings.



COLLARY: "Leadership" is merely procedural Evolution (hence improvement) never happen from the top via positiva. But degradation takes place from the top via interventionism and side effects of policies. And improvement from the top is necessarily obtained via negativa.

Commentary

It is well understood how natural systems blow up when altered from the top. The journalistic notion of "leadership" applied in political discourse is an insult to systems. Even elementary re-

form via change of minister prove ineffectual as ministers never really control the ministries.

18

RELIGION AND LEGAL SYSTEMS



RINCIPLE 18 Never conflate religion and legal system. "Christian" or "Judeo-Christian" values are not about religion, but the reverse: a secular tinkering tradition that arose principally from the separation of church and state in the West. Sharia is both a legal and a religious system.

Commentary

Ecclesia vivit lege romana: Christianity needed Roman law, unlike Islam that was law and could thrive outside the Roman world. Shedding Christian values and thought is shedding the past accretions of Western Civilization. See *Skin in the Game*. Distinction should not be made religious/nonreligious but rather tolerant/intolerant of other's beliefs.



PRINCIPLE Godel-Popper limit No person or group should ever be allowed to use the voting system, and more generally voting institutions, to run on a program with elements of anti-democracy.

Hitler came to power via elections. Sharia promoters must never use democracy.



PRINCIPLE Amnesty.

Part II

ARTICLES (POLITICAL DECISIONS)

1 IATROGENICS

Article 1: Iatrogenics

First, do no harm.

The iatrogenics of some policies are unknown; but what policies can be carried out are clear.

2 ETHICS OF OFFICE

Article 2: Every dollar made by a former politician or civil servant thanks to the fame and connections imparted by the office belongs to the taxpayer.

It is vastly more respectable to come to politics rich than come out of it rich. Consider Tony Blair, the Clintons, Al Gore, and... the Obamas. Politics is not a résumé enhancement move.

Contra and Limitations

A successful former president may claim that the source of income isn't the fame from government, but a natural charisma and intelligence that got her or him elected in the first place.

3 DURATION OF INSTITUTIONS

Article 3: No public institution or agency should be created without an expiration date.

Chateaubriand: "Les institutions passent par trois périodes: celle des services, celle des privilèges, celle des abus." Once public institutions are initiated, it is impossible to remove them; they are therefore extracted from the bottom-up selection mechanism and evolutionary pressures. If a public institution or agency is vital, then it will be renewed.

Contra and Limitations

It may be burdensome to the system to need to continuously reinvent institutions. Some mechanism of "justification", an intermediate one my work under the condition that it does not lead to automatic renewal.

4 PARTISANSHIP

Article 4: A Partisan's opinion is analytically invalid on its own, without comparison with that of another partisan.

A partisan's or an ideologue is defined as someone who's assessment of a situation doesn't depend on the situation. A partisan's opinion has no analytical value; it is merely representative when it corresponds to a voting group.

Inconsistency within monocultures: a narrative is fallacious 1) if it is logically incompatible with other narratives also held true by the same agents, 2) if it leads to the statistical clustering of causes that should be random, or, to the least, uncorrelated. This heuristic can help us identify monocultures, usually artificially propped up by some lobby. It is always suspicious when a person's ideas line up exactly to a specified party –as when someone embraces all ideas wholesale, without any idiosyncratic modification. The rest of the public needs to know they are arguing with a shill: you can observe futile exercises of people engaging in argument with a Monsanto shill or an operative for Saudi Barbaria thinking they will convince him or her of their point.

Example: there is a cluster for the advocacy of both GMOs and Glyphosate, when there is no particular logical link between the two positions. Well, there is a link: Monsanto sells both; and GMOs are actually an excuse to sell high doses of glyphosate.

Likewise, some nonrandom clustering of people who decry civilian casualties in Aleppo but forget about it in Mosul.

Inconsistency within Monocultures

5 BAILOUTS

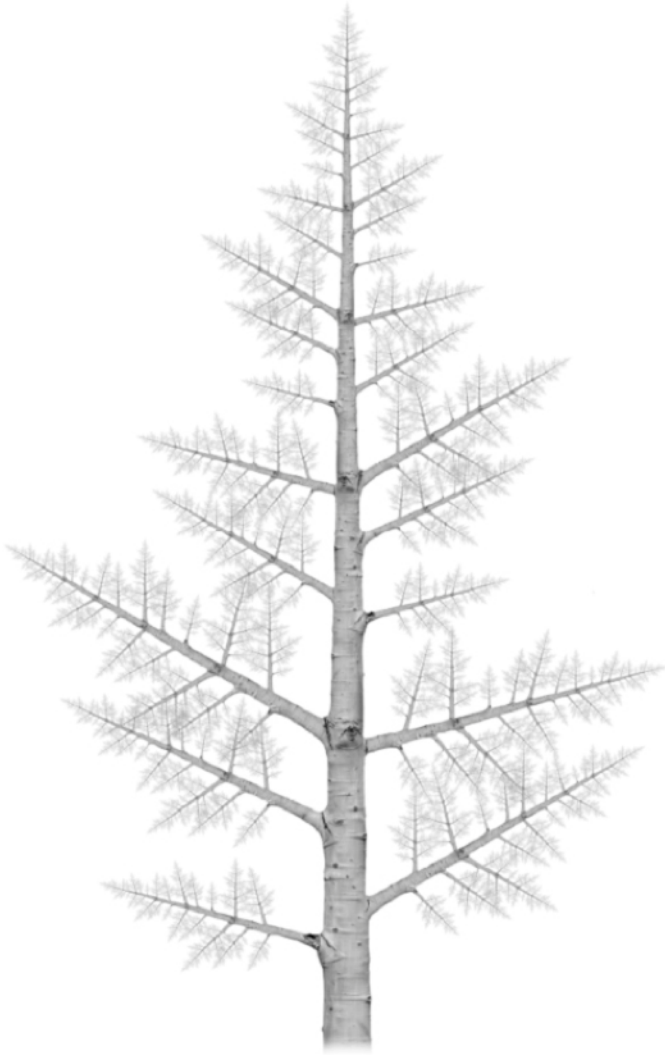


Figure 0.1: *Monofractal: layers of self similarity between branches and trees. Branches look like small trees. There is no centralized control, simply collections of local rules.*

Article 5: Bailout

Every company operating thanks to the backstop of the taxpayer should be treated like a utility, with its executives compensated like other civil servants.

Bankers tend to hijack the state. argument of "no cost to the taxpayer"

6 NGOS

Article 6: Non Governmental Organizations

Nobody should be ever involved in an NGO without residing permanently in the place where it is active.

NGOs can be agents of virtue merchandizing. This is to avoid the Bill Gates syndrome of promoting such "improvements" as GMOs in remote places where he does not reside, and therefore will not pay for long term side effects.

7 SCALE-FREE UNIVERSALISM

Article 7: Abstract scale-free universalism

^a *No situation should ever be dealt with in more abstract form than required. Life is about a collection of particulars that do not necessarily generalize without scale transformation.*

^a Not to confuse with the universality laws in physics and complex systems.

8 CHROMORACISM

Article 8: Chromoracism

Never designate races by color, rather by geography of origin: Caucasian, Subsaharan, East Asian, etc.

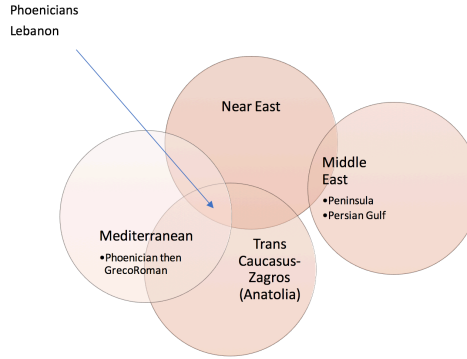


Figure 0.2: Identity politics gone wild. The exposition "Art and Identity in the Ancient Middle East" at the Metropolitan Museum in New York was a showcase of tagged exclusive identities brought from top-down; Edward Said-style identity mongers proceed to destroy the notion of cosmopolitan localism/Mediterraneanism of the Phoenicians by classifying them into the "Middle East". This shows the incoherence of non-localist Nationalism. Since c. 1100 BC Phoenicians (subsequently "Lebanese") have been the most Mediterraneans of peoples: look at food/behavior/looks. But since 1860 some low-Intellect Westerners (Arabists and founders of AUB, etc.) have decided de-Mediterraneanize (initially de-Ottomanize) to satisfy "identity" concepts.

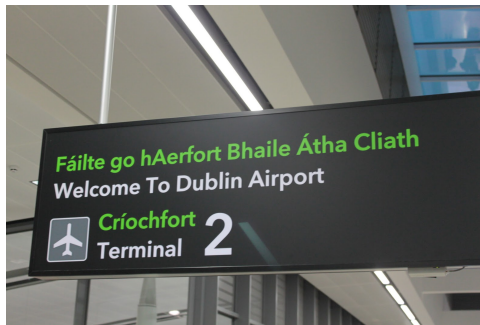


Figure 0.3: Verbalism: For the Irish, Gaelic roots are held to be "left wing" and supported by the Palestinian activists. For the Lebanese, Phoenician roots are considered "right wing".

Commentary

Background

The problem with identity politics and the diversitymongers is that they create exactly the same categories as stereotyping. Both identitarians and prejudicedtarians fail to get that the difference between groups, assuming they exist, do not show in small samples. Assume a certain race (people from planet X) have the usual small but "significant" differences in what is called I.Q., assuming we know how to measure it for nonnerds (we don't). If you hire 1000 such people, the difference between samples will be evident, thanks to the workings of the law of large numbers. But at the level of a single person, there is only a tiny probability the effect will be present—particularly when there is a high variance across the population concerned and there is variance for the very same person. "Life is in the preasymptotics" [15]. This chromogender-identitystereotyping is the same statistical error as the one journalists made in discussing *Fooled by Randomness*, ironically a book about statistical errors: they mistook the statement "life contains more randomness than it appears" for "it's all random, there are no skills involved".

Further Comments

Often racial identities are bogus, anachronistically made up, in a framework constructed to empower Northern European supremacists (by linking them to classical civilizations from which they were (very) remote at the time and separating Western Eurasian groups, particularly Mediterraneans, into "European" and "non-European"); all done in the ignorance of genetics, culture, mapping, statistical representation, and genetic distances. Labeling Aristotle as a "dead *white* male" but not Omar Khayam or Algazel is quite suspicious since 1) people who originate from the Zagros-Caucasus had patently lighter skin than Greeks and other Mediterraneans, 2) people from the Med, Aristotle himself, put themselves in a category that is equally separated from Northern European as it was from tribes from much further South.

Many people otherwise careful in "political correctness" (at least cosmetically) commit the violation of ageism. Saying "Mathematics is a young man's game" is always interpreted as such, not as statistical statement: "Mathematics is **most often** a young man's game".

9 NEGATIVE DEMOCRACY

Article 9: Negative democracy

Removal of long-ruling "leader".

10 CONCEALMENT & VISIBILITY OF MINORITY RULES

Article 10: Visibility of Minority Rules

Minority rules need to be made visible and explicit.

11 POLITICAL BEHAVIOR

Article 11: Political Ad Hominem

Never reject a political move by a political rival (or "enemy") in office doing good things, defined as otherwise acceptable if you would accept them had they been proposed by others.

12 BIGOTTEERING, I

Article 12: Bigotteering, I

No attribution of a label (racism, sexism, ageism, etc.) should be made unless 1) there is no other explanation, and 2) an explanation is needed. The burden of the proof lies with the accuser.

Originates with Tim Ferriss, describes tagging someone (or someone's opinions) as "racist", "chauvinist" or *somethinglikeit-ist* in situations where these are not warranted. This is a shoddy manipulation to exploit the stigmas accompanying such labels and force the opponent to spend time and energy explaining "why he/she is not a bigot". Note that it is the true victims of racism that are insulted by virtue-peddling bigoteers. Example: Both the Kurds who are asking for independence and the Arabs who refuse to grant it accuse one another of "racism".

13 BIGOTTEERING, II

Article 13: Bigotteering, II, Use of Labels

Never use labels unless they satisfy the rigidity criteria.

Christian Lebanese and Phoenicianists –Phoenicianism is a brand of localism – have been called "right wing" or "isolationists" by the Arabist and Arab imperialist propaganda, as well as the Palestinian machinery. Many separatists have been selectively smeared using the right wing label. Note the inconsistency from the previous point: the Palestinians (and the group of thinkers loosely called "Arabists") supported Irish separatism and the localist agenda of the Irish Republican Army (IRA), while attacking the nearly identical Lebanese localism.

14 SECOND ORDER BITOTTEERING

Article 14: Second Order Bigotteering

Siding with the accusatory party for such a label (say racist or sexist) because one belongs to the tribe or political group of the accuser, without without even investigating the source of the problem.

Commonly practiced by the children book author J.K. Rowling –such as siding automatically with Mary Beard in an intellectual conflict with a man simply because Mary Beard was a woman, without understanding the nature of the dispute, then spinning arguments to explain her support.

15 RETROSPECTIVE BITOTTEERING

Article 15: Retrospective Bigotteering

Accusing ancient individuals or groups of violating today's ethical norms.

Saying "Aristotle was sexist" or "Nietzsche was racist" should only be used in what probabilists call "filtration at time t " (their period) not the current period. There is nothing particularly wrong in reporting that ancients deprived a given subgroup of

Talmud: people can only be critical of others of their own time. Rashi: "Noah was ethical for his generation.

equality. It is not fair to use a or to flow back *isms* in time with the negative connotation they convey. Moral values might have been different at the time; they progress just like knowledge progresses. Using *isms* is no different from blaming the ancients for not understanding the existence of germs and calling them "obscurantists". The very accusation is equivalent to saying that moral values do not evolve!

Note that there are historical characters one can be harsh with, such as Napoleon who, among other iniquities, reinstated slavery in the French colonies and overrode the abolition by the French Revolution.

16 DEEP MINISTRIES

Article 16: Ministries

Employees of ministries should never be permanent.

Governments come and go, bureaucrats stay. Ministries aren't run by ministers or transitory figureheads, but by a "deep local microstate" of civil servants who have been there for decades and "own" the inside.

17 PEDOPHRASY

Article 17: Pedophrasty

Never manipulate using children as arguments to suspend skeptical inquiry.

Argument involving children to prop up an argument and make the opponent look like an asshole, as people are defenseless and suspend all skepticism in front of suffering children: nobody has the heart to question the authenticity or source of the reporting. Often done with the aid of pictures.

Can also describe the exploitation of babies by beggars who rent them from their parents.

It has its most effects on actors, journalists and similar people deprived of critical judgment.



Figure 0.4: *Pedophrasty is an effective strategy as it provides arguments to strike before the evidence is formed. People are nudged into "doing something".*

Example: Pedophrasty has been commonly used in the Syrian war by such agents as Julian Röpke supplying the German public with pictures of dead children.

You can see the naïveness of [?]

18 CHERRY PICKING

Article 18: Cherry Picking

One cannot be both scholar –or judge – and advocate.

It is highly non-philosophical and unscholarly to present a one-sided argument, even if correct –unless one declares plain unmitigated advocacy, in which case one is not a scholar. Example of cherry picking: U.N. reports (perhaps to justify their funds) present environmental situations as dire without counterpoint or global statistical representation. They will show "deforestation over [span years] without longer periods (say past 25 years), this fitting a window or noise variations to their story rather than the true trend.

Clearly you will always find a period during which, or a region where there was degradation. In combination with bigoteering: such a false accusation of bigotry, particularly if the accuser knows it is not the case, should cause a penalty to the bigoteer as if he/she were bigots.

Note that "false accuser" was the original meaning of the Greek word scyphant before drifting in the English language.

Exploiting the unsavory attributes of one party in a conflict without revealing those of the other party . Example: "He is a dictator".

The problem can take absurd proportions: in the Syrian War, was used by interventionistas describing the "dictator" without mentioning that his opponents are Al-Qaeda head-cutters.

You can detect partializing and dishonest thinking when the same people arguing for the removal of some dictator praise Saudi Barbaria forgetting to use the argument in such cases.

Article 19: Support for a person holding office

Support policies or specific actions, never individuals in office.

The counterpoint is never systematically attack or stand against a person, rather focus on specific policies.

Article 20: False Accusation

Any person making a false accusation needs to be penalized as if they committed the violation themselves.

In many legal systems, since Hammurabi's article, calumnies and false accusations are punished as if the accuser committed the infractions himself. **Nabothizing**: Production of false accusation, just as Jezebel did to dispossess Naboth.

Article 21: Lobbying and Professional Advocacy

Any form of paid advocacy aiming at causing imbalances in governance should be illegal.

Paid advocacy should be limited to courts of law, not to dealings entailing governmental decision-makers. Unpaid advocacy can be acceptable so long as it puts the lobbyists back at the level of the collective. All discussions between paid citizens and public officials should be made public *and* easily accessible. The temporal ban on lobbying by former government employees is not sufficient.

Article 22: Risk Transfer

Part III

QUAESTIONES

Quaestio 1*Is the argument for or against regulation?*

Regulation is to be used only in cases where skin in the game fails, that is, where there is no immediate visibility of the exposure, such as in the generalized Bob Rubin trade (GBRT). But unlike with the Bob Rubin trade, that can be solved by forcing someone to claw back past profits, and compensate others, thus representing a clear and effective deterrent, there are situations where this cannot be easily done. If Monsanto can, thanks to GMOs, transfer risks into the future, without anyone penalized by it, then we need tail protection.

Recall that the main government job should be systemic tail protection, not letting busybodies such as Sunstein and Thaler experiment with our lives.

Regulatory recapture is a real thing.

Note that in countries that inherited rigid codes (codes said "Napoleonic") the laws may not be adapted to modern environments.

Quaestio 2*Can someone be a genuine, uncorrupted, academic?*

Most certainly, but the problem is that people socialized into a system get eventually corrupted without realizing it, from simple things such as fear having to eat alone at the school cafeteria.

This means that, argument for argument, more weight should be given to the works of an independent scholar. It does not mean that independent scholars are necessarily credible (anybody can claim to be an independent scholar and the domain is rife with bu**ters), only that conditional on having the same rigor, their arguments are more genuine and less prone to corruption.

At the end, an opinion is validated the most by the risk someone takes to voice it.

Quaestio 3

We know that current risk management methods such as VaR and others derived from Modern Portfolio Theory based on Gaussian and near-Gaussian distributions are useless and harmful to their users. But they help students get a job. Don't you think the obligation of the university is to give the students skills in the marketplace?

The collective comes first. Never harm the collective. And never help individuals get an edge over the collective.

The *primum no nocere* applies to the higher layer first, lower layers later.

Quaestio 4

You run into a lobbyist (or an employee of a foreign funded think tank) in a social setting, say a cocktail party. Can you chat with him or her?

No.

Quaestio 5

Can politicians who privately educate their children ethically take a policy position on state education when in office?

Yes, 1) under the conditions that the children are no longer in private school at the time of this policy stance if the politician is in favor of increases in funding funding public education, 2) unconditionally if the politician is against funding for public education.

More generally, one should apply retroactive rules only to situations where there is the possibility of tacit collusion (say a regulator moves to the private sector, say Monsanto, hence his past actions are tainted by a behavior in favor of the industry that allowed him to get the job, or former Treasury Secretary Tim Geithner who got a big payoff from the industry he helped get yuuge bonuses in 2010).

Quaestio 6

University and tuition costs have far exceeded the pace of inflation for over 20-years. This is principally driven by no economic incentives for universities to share in the risk/cost of student debt. Should the federal government charge back universities for defaulted loans?

Yes, absolutely, to remove the agency problems. Students are financing 1) academic tenured game-players, 2) real-estate developers, 3) bureaucrats. The trick to make it work is immediate:

make universities liable for defaulted student loans encourage the suing of universities in the event of misfitness of the degree and mismatch to promises made encourage apprenticeship models

Quaestio 7

If you believe that awards, honors, and such items are an abomination that turn people into (zero-sum) spectator sports, and marks a departure of the recipient from virtue, should one advertise the turning down of a prize?

Never. It is your obligation to get in contact with those who grant the prize and let them know that you do not wish to be under consideration, and give them a chance to withdraw it quietly. Or post on your site that you refuse awards, which simplifies the problem. Inverse virtue is not virtue: if you are against awards because virtue should not publicized, its rejection too should not be publicized.

More significantly, if you do not like money, or have anti-materialistic aims, you should not publicize it as it too violates the principle of the privacy of virtue.

Quaestio 8

You tell someone something in private, as a person, then he goes and publish it in a newspaper. This is standard methodology by journalists who cozy up to you as a strategy to extract information. It is unethical?

Fat Tony would of course say that someone stoopid enough to trust a journalist deserves such. But the question goes beyond: can the private be publicized?

No.

The journalist violated a principle of ethics as he was approaching you socially, not informationally.

The question goes beyond. Say you had a falling out with a friend. Can you use information you got from him or her while friends, against him or her later? Never (I've almost done it once, then retracted and felt better after my retraction).

Quaestio 9

Is showing off a departure from virtue?

Not at all. Showing off is what makes us human. It is just that showing off *without risk* is a violation of the principle of the privacy of virtue.

So long as you take risk.

Quaestio 10

Fat Tony took out his fair share of enemies. Is there a SITG rule for when you must do the dirty work yourself vs when you let others do it?

The very idea of taking justice in your own hands violates symmetry if you don't want others to take justice with their own hands and violate due process. The entire Western civilization's idea of justice (which starts in Babylon) is based on such idea of socialization of judgment and punishment –though Roman law, socialized judgment but not punishment or restitution which you would have to carry out yourself.

However there are plenty of degrees of freedom *within* the law. Self defense is one, if you sort of see what I mean. Fat Tony would say that only morons violate laws or, even more Fat Tonyish: only morons get caught violating laws.

There is the argument of failure of the law, sort of the equivalent of market failure. Even then the answer is, *dura lex, sed lex*.

Quaestio 11*Which genetics research is racist?*

As I said in the section on IQ, some eugenists, say psychologists (Lynn) and intellectuals such as Mountebank Charles Murray have been promoting IQ differences between the races as means to degrade some races and elevate the Northern European brand as a superior one –with policy implications on welfare, immigration, and sinister matters.

But there is an entire brand of genetics that does the contrary. Research that looks for population movements is not. It is no different from someone looking for biological parents. Many African Americans have been engaged in it –as a matter of fact denying that is effectively racist. David Reich:

During the slave trade, Africans were uprooted and forcibly deprived of their culture, with the effect that within a few generations much of their ancestors' religion, language, and traditions were gone. In 1976, Alex Haley's novel *Roots* used literature to begin to reclaim lost roots by recounting the odyssey of the slave Kunta Kinte and his descendants. Following in this tradition, Harvard professor of literature Henry Louis Gates Jr. has capitalized on the potential of genetic studies to recover lost roots for African Americans. (*Who We Are and How We Got Here.*)

Likewise, thanks to genetic research, I busted theories of "Indo-European" and Greeks as part of the Northern European "race" meant to give some prestige ancestry to former Barbarians when in fact Greeks were much closer, in origin, to ancient –and current –Near Eastern populations.

Part IV

DEFINITIONS

1 VERBALISM AS A CENTRAL FALLACY

We will present two aspects of failure in reasoning that should encompass the usual fallacies.

Definition 0.1 (Verbalism)

The use of terms^a both central to one's discourse and devoid of rigidity of meaning; their meaning can change with context or circumstances.

^a These definitions reflect formal definitions for this author, not necessarily the general acceptance of the term among the general population or some scholarly circles.

Note: words that escape definitions can be rigorous and nonverbalistic if they always and in all practical situations point to the same thing (a well known application is the case where obscenity could not be easily defined at the time, but, as Justice Potter Stewart in *Jacobellis v. Ohio* stated "I know it when I see it", to describe his threshold test for it). **Note:** misnomers are not necessarily verbalistic and unrigorous if they have a rigid meaning—say "martingale" in mathematics (but for uses limited to mathematics, not gambling strategies), or what is called abuse of language in hard science. .

Verbalism includes the use of:

1. Ill-defined terms, say "progressive", "liberal", "modern", "populist", "sectarian", that require a scale and a degree (rate of change meant by "progressive"), etc.
2. Well-defined and rigid terms but used in a way that does not correspond to their meaning, say "correlation", "volatility", "regression", so their mathematical definition does not map to the connection [4] [11].
3. Terms stretched outside their original meaning "nazi", "fascist", "racist", *Peer Gynt Suite No. 2*, Op. 55, etc.
4. Such expressions as "evidence" without statistical significance.
5. Circular terms; ones that are explained by other terms that loop to the same source, s.a. "rationality" without mapping to proper axiomatic framework of rationality (hence called "pseudo-rationality").

Note that with such notions as "correlation" the proper meaning is reduction of uncertainty concerning one of the variables conditional on knowing the other, which is nonlinear: .6 correlation is far more than twice .3.

6. Words that do not have a robust mapping as they can have an arbitrary, gerrymandered definition that, not being robust, changes according to periods, such as "Western Civilization", "East-West divide", etc.
7. Substitution of one term for another, say using "democracy" with implication of "governance", or "legal" for "ethical".
8. Euphemisms and exaggeration in rigorous thought.
9. Distinctions without a difference but presented as a matter of substance.
10. Ambiguous labels that can fool people. Example: the "Holy Roman Empire" was not a continuation of the Roman Empire (Byzantium was) but the name was potent enough to confuse people into believing the original (mostly) Franco-German European union was the continuation of ancient Rome. Likewise, the designation "Arab" could have meant Westerner (i.e. Mediterranean) or "foreigner" for Arabians and Peninsular people, while understood as "nomad" by some, confusing enough people into political theories and formulations such as the centralized lunacy known as "Arab nationalism".

Note: Distinctions can be with and without differences, depending on context and uses. The Eastern Church mapping the difference between (homoousios), "consubstantial", vs. (homoiousios) "partakes of a similar substance", is not a distinction without a difference –in Greek, but both terms could be translated into the same term in Latin in early disputations with the terms *coessentialis* and *consubstantialis* to represent both.

Note: The problem isn't using labels as shortcuts. The problem with the verbalistic is that he or she thinks in label.

The user should be free to use his or her vocabulary, but, as with a mathematical statement, a legal document, or a computer article, every word needs to map to something precise, whether defined or not.

Clearly, the scholar does not need to produce a complete codification of the expressions used; but should be able to back-up every single term used.

Commentary

Verbalism tends to be absent from financial term sheets, mathematical documents, legal contracts, and courts of law –the latter benefits from, say the articles of New York State Penal article

which has an exhaustive list of terms used in court that can be explicitly defined.

Vagueness has traditionally been the enemy of law: in the United States, laws that violate the vagueness doctrine are unconstitutional.

For Frankfurt's *On Bull***** [3], both the liar and someone saying the truth aim at the veridicality in their statement. We are adding an additional constraint to make it of rigid meaning. And intentionality needs not be present: one can be verbalistic without being bullshitter in the Frankfurt sense. Many students of political science are verbalistic without being bullshitters which requires awareness –it is their discipline that is bullshit, not them.

2 HAND WAVING

Definition 0.2 (Hand-waving)

Hand-waving reasoning is one that skips critical steps, but not necessarily in exposition. It gives the impression of analytical thoughts and derivations but is in fact a facade of unrigorously produced arguments.

Hand-waving is most often complained about in mathematics, but is vastly more rampant in fields that attempt scientific approach, such as psychology and political science.

Commentary

Fields like psychometrics produce all manner of equations and mathematical language, but repose on flaws in elementary interpretation of concepts such as correlation, leading to spurious derivations, particularly when it comes to the "g", general intelligence.

3 UNCERTAINTY AND COMPLEXITY: DEFINITIONS

Definition 0.3 (Complex Systems)

For our purposes, a complex system is one where, dynamically 1) interactions between parts can produce a different collective and individual outcome than when examined in isolation, 2) interactions are at least intermittently present.

It is typically associated with the following properties.

Interactions Specific deterministic and random interactions between components –owing to dependence –produce different behaviors from those of the properties seen in isolation, particularly when asymmetric.

Scale transformation and emergence properties These cross-dependencies produce different outputs depending on the scale (as per Anderson's "more is different" [1]).

Commentary Consider the behavior of a bee colony compared to that of the individual bees. One can no longer assume "everything else being equal" and perform naïve comparative statics in the presence of crossdependencies, or by making a separation between endogenous and exogenous variables, hence automata below. We note one of the failure of behavioral economics in attempting to infer properties of aggregates from those of components –as we note, a collection of biases in individuals does not lead to the biases in markets. A central failure in centralized top down systems is the eliminations of the interactions outside exclusively hierarchical ones.

Nonlinearity There is at least one scale at which functions of averages, at some scale, diverge from averages of sums.

Commentary This is a standard local convexity effect (from Jensen's inequality) drilled in [13] and [12]. Mean-field approaches are based on studying the behavior of large and complex stochastic models (those with a large number of small individual components interacting with one other) by reducing them to a simpler

"average" one. Typically they reduce a many-body problem to a one-body problem. They fail in physical systems. Likewise, the field of evolutionary biology (The gene centered view of evolution, "selfish gene") improperly generalizes the behavior of aggregate populations from the assumption that one can assign fitness to each allele (symmetry breaking and spacial distribution, see Sayama and Bar Yam, [9] [8]: "the predictions of the gene centered view are invalid when symmetry breaking and pattern formation occur within a population, and in particular for spatially distributed populations with local mating neighborhoods in the presence of disruptive selection.") Likewise "fitness" is never determined unless future interactions are known, which violated numerous forecastability rules. Under unpredictability fitness is harder to pin down. The idea of a *representative agent* has been dominant in economics and social science; there is no *representative agent* under nonlinearities –the market price is determined by the marginal squeezed buyer, not the average.

Nonprobabilistic modeling The random or deterministic process for a vector, even when predictable, cannot be expressed by a higher dimensional stochastic process, with its snapshots expressed as a multivariate probability distribution. Hence: **automata, agent based models.**

Commentary Consider running a company's income as a stochastic process (i.e., over time). The fate of the company depends on its own income, but also on that of its competitors, suppliers, the economy, etc. The "terrain" is also random. Consider an n -dimensional vector with components $X_{i,t}$ indexed in space and time t , $\{X_{1,t}, X_{2,t}, \dots, X_{n,t}\}$. $X_{1,2}$ depends on $X_{2,1}$ which itself depends on $X_{1,1}$, etc. In standard time series there is a problem of covariance stationarity, that is, the covariance matrix is not independent from time t .

Computational opacity Computational irreducibility (Wolfram [18]) cannot be ruled out in navigating successive states, meaning that to evaluate the state of the system between discrete periods t and $t + m$ requires knowing the future state at every step, hence a minimum of m computations.

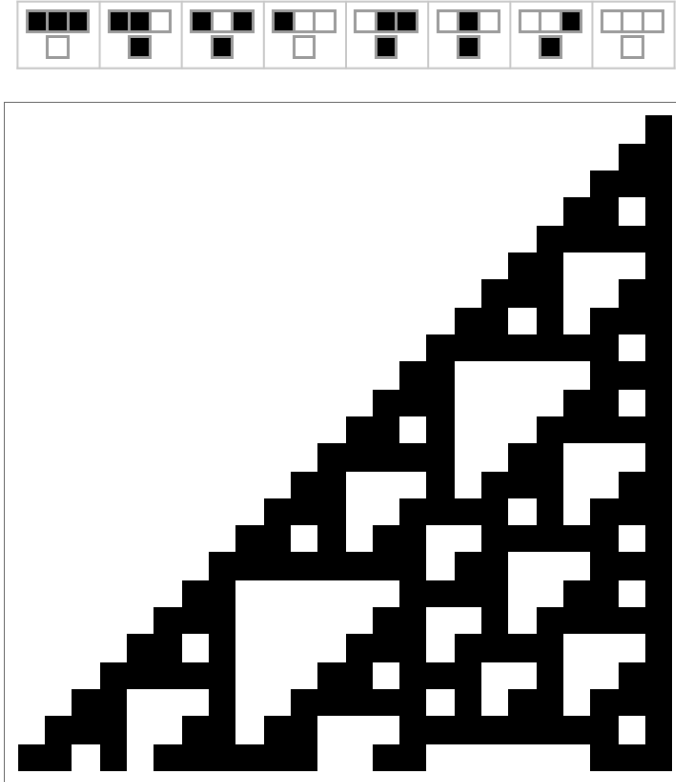


Figure 0.1: Cellular automata. Rule 110 is computationally irreducible. Above we see the rule: if black on both sides, next is white, if black on right and white on left, black, etc. We start with a black unit, and flow down on the page for 110 steps. The next graph shows what happens after 410.

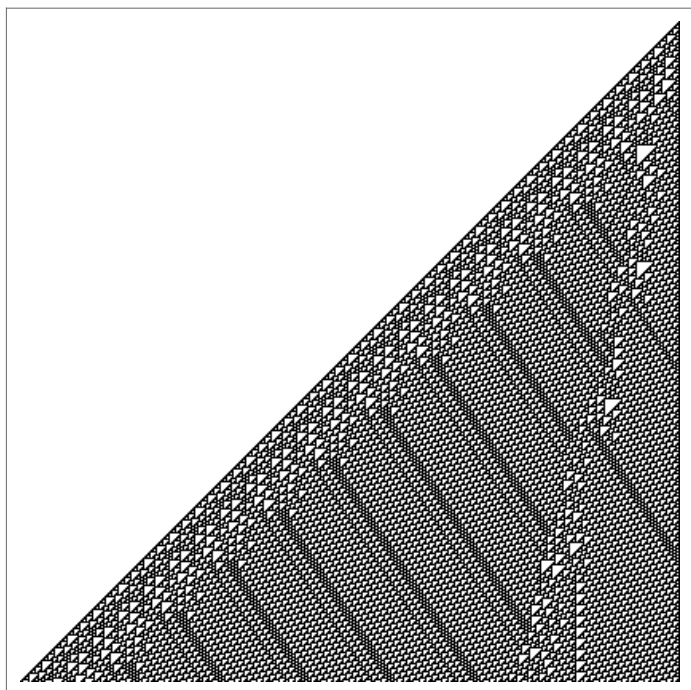


Figure 0.2: Rule 110 after 500 steps starts showing shapes that are totally random –but predictable one step ahead.

Commentary When you try to model the trajectory of a ball, a bullet, a planet, or a falling piano from the 53rd floor, you do not need to examine every step. You summarize with a function. Under interactions such a summary is just not possible. You have to redo every step. Figures 0.1 and 0.2 show the problem of irreducibility.

Fat tailedness in distribution space The presence of feedback loops between components and the abrupt switching of states means that random variables in the system can produce multiplicative effects, hence fail to converge to the Gaussian basin.

Commentary

CLT requires independence. Even if at some scale there is a different output, the thing works.

Self-organization, absence of centralized control The interactions flow –thanks to simple rules – upward from the bottom layer, never from the top of the hierarchy.

Commentary

Fractal hierarchy means that relationships between entities...

Definition 0.4 (Fractal Localism)

No unit is examined vertically except

Definition 0.5 (Filtering)

Filtering and skin in the game

BIBLIOGRAPHY AND INDEX

BIBLIOGRAPHY

- [1] Philip W Anderson. More is different. *Science*, 177(4047):393–396, 1972.
- [2] James M Buchanan et al. Why i, too, am not a conservative. *Books*, 2006.
- [3] Harry G Frankfurt. *On bullshit*. Princeton University Press, 2009.
- [4] Daniel Goldstein and Nassim Taleb. We don’t quite know what we are talking about when we talk about volatility. *Journal of Portfolio Management*, 33(4), 2007.
- [5] Friedrich August Hayek. *Why I am not a conservative*. Centre for Independent Studies, 1992.
- [6] Karl Raimund Popper. *The Open Society and Its Enemies*.(vol. I. *The Spell of Plato*. Vol. II. *The High Tide of Prophecy: Hegel and Marx and the Aftermath*.). 1966.
- [7] Andrew Roberts. *Napoleon the Great*. Penguin, 2015.
- [8] Hiroki Sayama and Yaneer Bar-Yam. The gene centered view of evolution and symmetry breaking and pattern formation in spatially distributed evolutionary processes. *Nonlinear dynamics in the Life and Social Sciences* (ed. by W. Sulis and I. Trofimova), IOS Press, pages 360–382, 2001.
- [9] Hiroki Sayama, Les Kaufman, and Yaneer Bar-Yam. Symmetry breaking and coarsening in spatially distributed evolutionary processes including sexual reproduction and disruptive selection. *Physical Review E*, 62(5):7065, 2000.
- [10] TC Schelling. *Micromotives and Macrobehavior*. George J. McLeod Ltd, 1978.

- [11] Emre Soyer and Robin M Hogarth. The illusion of predictability: How regression statistics mislead experts. *International Journal of Forecasting*, 28(3):695–711, 2012.
- [12] N N Taleb and R Douady. Mathematical definition, mapping, and detection of (anti) fragility. *Quantitative Finance*, 2013.
- [13] Nassim Nicholas Taleb. *Antifragile: things that gain from disorder*. Random House and Penguin, 2012.
- [14] Nassim Nicholas Taleb. *Skin in the Game: Hidden Asymmetries in Daily Life*. Penguin (London) and Random House (N.Y.), 2018.
- [15] Nassim Nicholas Taleb. *The Statistical Consequences of Fat Tails*. STEM Academic Press, 2020.
- [16] Nassim Nicholas Taleb, Rupert Read, Raphael Douady, Joseph Norman, and Yaneer Bar-Yam. The precautionary principle (with application to the genetic modification of organisms). *arXiv preprint arXiv:1410.5787*, 2014.
- [17] Nassim Nicholas Taleb, Rupert Read, Raphael Douady, Joseph Norman, and Yaneer Bar-Yam. Formalizing the precautionary principle. *Preprint*, 2019.
- [18] Stephen Wolfram. *A new kind of science*, volume 5. Wolfram media Champaign, IL, 2002.