

The Certainty of Uncertainty. A Discussion of Patrik Aspers' Book

Bruce G. Carruthers* 

Department of Sociology, Northwestern University (United States)

Submitted: November 4, 2024 – Accepted: November 21, 2024 – Published: January 22, 2025

Abstract

Patrik Aspers' recent book on uncertainty offers a welcome opportunity to explore how risk and uncertainty are socially structured. I summarize and discuss Aspers' contribution.

Keywords: Uncertainty; decision-making; risk; institutions.

*  b-carruthers@northwestern.edu

A great deal of contemporary public discourse and attention seems to be about risk. Corporate managers talk about their “appetite for risk”, while policy researchers discuss the “risk shift”, and some have famously written about the “risk society”. Financial regulators worry about “risk management”, and excessive “accumulations of risk”. Banks like JP Morgan devised quantitative measures of “value at risk” to guide their investment decisions, and “hedging risks” is a form of mitigation. Indeed, the very existence of commodity and financial derivatives markets has been justified on the grounds that they help participants hedge their risks. New species of risk have been named and catalogued (e.g., political risks, legal risks, operational risks, interest rate risks, foreign exchange risks, model risks, labor risks, liquidity risks, reputational risks, etc.). We seem to live in a world overflowing with risks. In fact, however, what we confront is very often *uncertainty* rather than *risk*.

For Patrik Aspers (2024), uncertainty concerns the future and is produced by a lack of knowledge. An individual dealing with uncertainty is someone who doesn’t know what will happen, and they cannot be certain about the consequences of their own actions. Engaging Frank Knight’s famous distinction between certainty, risk, and uncertainty, Aspers adds a critical sociological dimension by pointing out that although all individuals grapple with uncertainty, its extent and shape vary a great deal and depend on a person’s position in a structure of formal and informal social institutions and social forms. His book engages an unusually diverse set of thinkers, ranging from economists Frank Knight and Douglass North to phenomenologist Alfred Schütz, pragmatist John Dewey, and anthropologist Mary Douglas, and he even borrows a formulation from former US Secretary of Defense Donald Rumsfeld about “known unknowns” (although Rumsfeld isn’t cited). Aspers reminds us that despite how much people view uncertainty as problematic, and try to reduce it, uncertainty nevertheless remains an important source of dynamism and profit. Uncertainty, in other words, isn’t always just a problem. Aspers’ book operates mostly at a conceptual level, developing an analytical framework and using specific examples to illustrate and elaborate key points. Occasionally, Aspers (2024) will describe an overall historical trend or pattern. For example, he says that there is today less uncertainty than in the past (pp. 11–12).

Frank Knight (1921) distinguished certainty from risk and uncertainty. To be certain about a decision meant that an individual knew which consequences followed from each of their alternative courses of action. Depending on how they valued those consequences, they could choose the “best” one and act appropriately. Complete certainty required a level of knowledge that verged on omniscience. In facing risk, by contrast, an individual didn’t know which consequences would occur, but they did know the probabilities of their occurrence. Instead of choosing the best alternative, they could choose their best expected alternative (where “expectation” is used in the mathematical sense of the term). Obviously, risk involves less knowledge than certainty. Finally, uncertainty means that individuals don’t know the consequences of their actions and they don’t know their likelihood of occurrence, either. Individual decision-makers are the least knowledgeable under these circumstances. To escape from uncertainty and shift to risk requires quantification: a decision-maker can’t simply believe that an outcome is vaguely “likely” or “unlikely”. They must be able to attach a precise number to the probability that an outcome will happen. Beyond uncertainty lies “ambiguity”, characterized by “interpretive openness”. But aside from a brief discussion early on (2024, p. 6), Aspers has little to say about ambiguity.

Complex natural systems, like the biosphere, involve positive and negative feedback loops, variable temporalities, non-linearities, threshold effects and tipping points, stable and unstable equilibria, and other features that make it almost impossible to know, with certainty, the

consequences of a particular intervention. This is why we should all be very nervous about various proposed geoengineering “solutions” to global climate change. Interactions between humans and nature are therefore characterized by uncertainty and marked by a succession of unintended and unforeseen consequences. Over time, however, the advance of scientific knowledge has reduced at least some of the uncertainties about how humans interact with their natural environment, and how nature evolved and operated independent of human activity. This long-term trend reflects one of Aspers’ (2024) major points: more knowledge means less uncertainty. Science is a collective enterprise that engenders what Aspers calls “states of the world”: public knowledge about facts, about relations between facts, and about outcomes (p. 3). Progress in science renders the natural world more “knowable” and predictable, and hence less generative of uncertainty, than in the past.

Aspers (2024) is particularly interested to study social uncertainties, which stem from the interdependence and social orientation of human action. Even if nature were predictable (and it isn’t), humans are definitely not, and so the human environment is an unending source of uncertainty. Aspers also focuses on socially-based ways to *reduce* uncertainty. In part I of the book he covers principles of states of the world, with a chapter each on informal institutions, formal institutions, and evaluations. Unlike with respect to the natural world, these uncertainties are both created and resolved through social activity. Aspers uses various distinctions to organize his discussion, but the difference between formal and informal institutions is particularly important. Many have recognized this difference, so it is not original to Aspers, and have formulated it in a variety of ways.

Building on Douglass North (1990), Aspers states that formal institutions are created by means of decisions, whereas informal institutions grow out of “mutual adjustment” of actors over time (2024, p. 27). In other words, people create formal institutions through some kind of conscious deliberative process. They might, for example, write a constitution, pass new laws, incorporate a for-profit firm, establish a non-profit organization, devise a set of standard operating procedures, or simply set standards. Formal rules are explicitly stated, enforced by sanctions, and they apply to actors besides the rule makers themselves (p. 47). How numerous are those other actors depends on the extent of formal jurisdiction and whether the rules apply to everyone in a nation, within a municipality, or simply to the members of a specific organization. Aspers notes that formal institutions can change quickly and decisively, as when a law is repealed or a procedure modified.

Informal institutions, by contrast, have a taken-for-granted and even habitual quality that emerges out of mutual adjustments between people, backed by social sanctions. Examples include norms, behavioral scripts, informal codes and prescriptions, and values (p. 36). Informal institutions needn’t be created as a solution to problem. They can just emerge, seemingly without anyone really thinking about it. They don’t have to fulfill a function or serve a specific purpose. As compared to formal institutions, they cannot be changed quickly. Instead, they evolve over time and frequently are less visible than their formal counterparts.

Formal and informal institutions reduce uncertainty by shaping current human action and by setting expectations about future human action. In this latter respect, they can operate like self-fulfilling prophecies, becoming true even if they were not initially so. If a group creates new operating rules for private transportation, for example, these formal traffic laws both structure how people act, and shape how they expect others to act. Consider the rule that drivers must keep their vehicle on the right hand side of the road. It is, in a sense, completely arbitrary whether everyone drives on the right, or drives on the left: these are not alternatives dictated by laws of nature. Both are equally viable, so long as everyone conforms to the same rule. As

a legally-enforced convention the rule constrains drivers, but also drivers' expectations about other drivers. These mutually-reinforcing effects greatly reduce the uncertainty that drivers face on the road and make traffic safer and more predictable. The stable application of such traffic rules also helps create habitual driving: people automatically drive on one side of the road. Conscious deliberation may have been necessary to set up the traffic rule in the first place, and people learning how to drive can be very conscious of what they are doing with the steering wheel, but conformity with the rule eventually becomes unconscious. And, as anyone who has driven in a country with different driving rules knows (e.g., British drivers in the US), such habits can be hard to unlearn. Deep-seated rules are hard to change collectively (witness Sweden's famous overnight switch in September 1967 from driving on the left to driving on the right).

Consider another type of formal institution: metrological standards. People can measure length using feet, fathoms, or meters; they can estimate weight with pounds, stone, or kilograms. Both the metric and imperial systems work well to create certainty about a variety of physical properties so long as they are given common definition and applied systematically and consistently (although the metric system is superior in terms of its arithmetical tractability, thanks to decimals). This metrological certainty translates into social certainty by providing collective standards that facilitate market exchange, fiscal extraction, and a variety of other activities. Standardized weights and measures have long been promulgated by sovereign governments that recognized how much metrological certainty could support a thriving economy. Today, metrology is an international endeavor and it is hard even for powerful states to act unilaterally. These units were defined through conscious deliberation, but their general and pervasive application socializes individuals to think with them unconsciously. A tailor in Chicago is probably better at estimating the waist size of a customer in inches rather than centimeters, although either unit of measure would do when tailoring someone's pants.

Formal and informal institutions are not simply alternative ways to reduce uncertainty, whether intended or not. The relationship between them is asymmetric because, according to Aspers (2024), informal institutions provide the foundation (or "bedrock") for formal institutions (p. 50). He echoes Durkheim's recognition of the "non-contractual basis for contracts" and his point suggests that the role of informal institutions in uncertainty reduction is even greater than we might suppose. Operating in the background, low in salience, informal institutions reduce uncertainty through their own direct effects, but also indirectly by making possible formal institutions. Here the "bedrock" designation is telling because bedrock is stable. It doesn't shift. Formal institutions create certainty in a way that can be adapted to changing circumstances or to new types of uncertainty. Informal institutions, by contrast, reduce uncertainty steadily, durably, and in a manner that doesn't respond quickly to new imperatives.

Aspers (2024) doesn't spell out how formal institutions are founded on informal ones, except to say that they are. Could it be that informal institutions are like "building blocks" out of which people construct formal institutions, where their decisions about how to build new formal institutions are akin to bricolage? Or, since formal rules are always incomplete (one can't write completely consistent and explicit rules covering all contingencies), perhaps informal institutions "fill in" the gaps that afflict formal rules, reconcile their internal inconsistencies, and impart flexibility and discretion where and when these are needed. For example, informal norms could be applied to grant exceptions to formal rules when strict adherence to protocol will produce a problematic outcome. In this case, informal rules "fix" formal ones. It might also be that informal institutions bolster formal ones through the action of internalized norms, so that actors conform to the rules without continuous oversight or external sanctioning. And

if knowledge generally reduces uncertainty, what to make of “informal” or “tacit” knowledge? Does it create certainty in the same way as formal knowledge? What might it mean to codify such knowledge and turn it into formal knowledge?

Part I closes with a chapter on evaluations, which involve a two-step process (p. 68). The first is categorization, and the second an assessment or attribution of quality or value. For example, someone might classify an organization as a school, and then rate it in terms of its quality. The evaluation answers two questions in succession: is this a school (yes or no)? And if yes, how good of a school is it? Evaluations reduce uncertainty by organizing the tangible and intangible things of the world into distinct categories with determinate qualities. In a sense, the world is simplified and becomes more legible. Sometimes the categories are taken-for-granted and function in the background (akin to the *a priori* categories that organize perception). Other categories result from conscious deliberation and are foregrounded (e.g., the invention of the sport utility vehicle as a category of automobile with a distinct market niche). Matters can become unsettled as categorical systems evolve, sometimes involving the fission (splitting) or fusion (lumping) of older categories, the redefinition of boundaries between categories, or the creation of entirely new categories *ex nihilo*. Similarly, criteria of value evolve and so evaluated objects can rise or fall on the value scale. The invention of new categories may even increase uncertainty for a time by posing the question of which criteria will be used to value items in this new category.

Principles undergird the topics of Part I. But what if there are no principles? The answer comes in Part II, where the focus shifts from states of the world to how they are formed (p. 83). Without principles, the world is made more certain through the application of publicly recognized forms. Aspers (2024) devotes a chapter each to convaluations, deciding for others, and contests.

The convaluations discussed in chapter 5 respond to value uncertainty: what is something “worth” (where its value need not be economic)? A convaluation (etymologically this term signals “valuing together”) is a publicly recognized social structure that establishes that value. It is not the same as measurement using objective standards. Rather, people come together and through a mutual process determine value. Aspers (2024) gives the example of festivals, which establish the value of performance art (a notorious inscrutable activity). To participate in a particular art festival establishes the quality and style of a performance artist, depending on the status of the festival. To participate in a sequence of such festivals gives that artistic value a trajectory over time, and a biographical arc for the artist. In other words, the uncertainty of performance art gets reduced. Elections and markets are other examples of convaluations. Economists sometimes assert that one of the virtues of market economies (as compared to command economies) is “price discovery”. After bringing together all the interested parties into a single structure called a market where a series of bids and asks allows them to respond to each other, everyone learns the “true” value of a commodity, as indicated by the market price.

Chapter 6 presents another form, awkwardly if accurately named “deciding for others”. Examples include reviews, prizes, rankings, ratings, or situations where recipients do not understand the value of a good or service they receive (e.g., “credence goods”). In these cases, some authoritative or expert third party determines relative value on behalf of a particular audience. For example, students applying to a US law school are uncertain about which are the “best” law schools and so to ascertain their value the students look to law school rankings issued by a variety of bodies. Diners unsure about the quality of an expensive restaurant wonder if the food is worth the price, and so rely on the food critics who write restaurant reviews. These forms reduce uncertainty but their effects depend on the prior establishment and recognition of ex-

expertise, and those effects diminish when reviews/ratings/etc. proliferate. If there are so many different rankings and prizes that everyone is ranked highly somewhere, and everyone gets a prize, these signals of value become noisy again (p. 132). Offsetting this tendency is something like the “Matthew Effect”, where being highly scored in one ranking, or winning one prize, makes it easier to earn other high rankings and prizes. When this happens, separate determinations of value become correlated, and even reinforcing, and they all send out the same signal. It can unleash a “winner takes all” dynamic.

The final form Aspers (2024) discusses is that of the contest: which side is better? Who is the best? Chapter 7 argues that contests resolve such uncertainties about value by producing winners and losers. Unlike other forms, they do not reduce uncertainty primarily through the accumulation of knowledge. These contests can be violent (US football games, boxing matches) or not (chess games, court cases and lawsuits), but they are not anarchic. Contests are governed by rules that ensure there will be a winner, even if who it will be is unknown at the outset. In a fair contest, those rules are applied by an impartial judge or referee, and the result is affirmed by the audience. The significance of a contest goes up the more uncertainty there is beforehand. A contest which has a foregone conclusion isn’t very interesting to anyone; betting on a heavy favorite is kind of boring.

Uncertainty reduction is presented as if it were generally a good thing, and most of the book is a discussion of how this comes about. Through a variety of social means, people deal with “the problem of uncertainty” (p. 1). In a couple of places Aspers (2024) complicates this picture, noting that uncertainty creates opportunities (p. 155), and that sometimes people seek to combine certainty for themselves with uncertainty for their opponents (p. 158). This unevenness of knowledge and uncertainty goes beyond what is recognized in the standard sociology of knowledge (p. 16). Such telling exceptions to the general rule that more-certainty-is-good warrant further exploration, and one place to look is in the direction of Jack Knight (no relation to Frank). Jack Knight’s (1992) analysis of social institutions argues that their most relevant effect may not have to do with improvements in efficiency (e.g., less uncertainty generally means better decisions), but rather with distributional outcomes (who gets what). The creation of winners and losers may be much more pervasive and consequential than chapter 7’s singular focus on contests suggests. For example, standard-setting doesn’t necessarily benefit all because everyone enjoys reduced uncertainty. “Standards wars” in technology (Betamax vs. VHS, Apple vs. Microsoft operating systems, QWERTY keyboards vs. other configurations, etc.) should remind us that adoption of particular standards can benefit some and harm others, and that standard-setting can be a power struggle. The distinction between “rule makers” and “rule takers” in historical institutionalism underscores how much power differences shape the creation and application of rules, even if their general effect is to reduce uncertainty.

Aspers’ brief discussion of “uncertainty absorption” (2024, p. 48) raises a parallel issue that warrants further development. Originally proposed by March & Simon (1958), this idea characterizes how organizational decision-making occurs. As information flows through the hierarchical layers of an organization, it rarely remains in its raw state. Were this to happen, key decision-makers at the pinnacle of the hierarchy would suffer from total information overload. Instead, information is processed at lower organizational levels, and inferences about the data, rather than raw data itself, are passed on to higher levels. Information inputs that were originally very messy, contradictory, or inconsistent, are edited, summarized, tidied up and interpreted, and the much more conclusive-seeming interpretations become the output that subsequently is transmitted elsewhere within the organization. The uncertainties that originally plagued the informational inputs have been absorbed by the interpretive process. How this works within hier-

archical organizations depends on a combination of formal procedures and informal practices, but the effect is to reduce uncertainty. Since the formal interpretive procedures are controlled by the organization's managers (as they set the "premises of decisions" for their subordinates), this introduces significant power differences into the process of uncertainty reduction.

Uncertainty is part of the human condition, stemming from both social and natural sources and mitigated through different social solutions. It may be ubiquitous, but it isn't monolithic or unvarying. Neither is uncertainty reduction. The generic solution to too much uncertainty is more knowledge, which can be created in a variety of ways. But knowledge isn't monolithic or unvarying, either. As Aspers (2024) well appreciates, human knowledge is reflexive and influences its own premises. Aspers' book is useful because he addresses this important topic in a disciplined and insightful way. He doesn't treat all aspects of his topic (impossible to do in a book barely 200 pages long), and a more systematic discussion of power and uncertainty remains to be pursued, but he certainly lays some critical groundwork (dare I call it "bedrock?") that others can build on.

References

- Aspers, P. (2024). *Uncertainty: Individuals Problems and Public Solutions*. Oxford: Oxford University Press.
- Knight, F. (1921). *Risk, Uncertainty and Profit*. Boston, MA: Houghton Mifflin.
- Knight, J. (1992). *Institutions and Social Conflict*. Cambridge: Cambridge University Press.
- March, J.G., & Simon, H.A. (1958). *Organizations*. New York, NY: Wiley.
- North, D.C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Bruce G. Carruthers – Department of Sociology, Northwestern University (United States)

📧 <https://orcid.org/0000-0002-2703-3107> | ✉ b-carruthers@northwestern.edu

🔗 <https://sociology.northwestern.edu/people/faculty/core/bruce-carruthers.html>

Bruce G. Carruthers is the John D. MacArthur Professor of Sociology at Northwestern University and a Long-term Fellow at the Swedish Collegium for Advanced Study. His most recent book is *The Economy of Promises: Trust, Power, and Credit in America*, published in 2022 with Princeton University Press.