## Uncertainty, Reduced. A Discussion of Patrik Aspers' Book

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#### Abstract

The essay discusses Patrik Aspers's recently published book Uncertainty. Individual Problems and Public Solutions from a sociological perspective. The book makes important contributions to the interdisciplinary study of uncertainty, particularly by introducing (and maintaining) a clear distinction between risk and uncertainty and by emphasizing the fundamental role that informal and formal social institutions play in reducing or managing uncertainty in everyday life. My main criticism is that it focuses exclusively on the analysis of public knowledge in terms of reducing uncertainty. Many of the forms of public knowledge discussed in the book — including, for example, ratings and rankings — can just as well be understood as forms of producing and specifying uncertainty, partly due to their publicness. This argument is presented in the second part of the essay and illustrated based on experience in the theorization and empirical study of rankings. The analysis leads to the more general argument that modern institutions and discourses also generate expectations that shape the experience of (un)uncertainty. These expectations form social contexts that co-determine whether public knowledge is experienced as effectively reducing, producing or otherwise specifying uncertainty, and, in so doing, undermine any attempt to determine "objectively" whether we live in more or less uncertain times than earlier societies. Taking such complications into account would change the message of the book about uncertainty reduction and could help link it to other strands of uncertainty research.

**Keywords**: Uncertainty; reduction of uncertainty; production of uncertainty; experience of uncertainty.

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#### 1 Introduction

Patrik Aspers' new book, *Uncertainty. Individual Problems and Public Solutions* (2024), is a pioneering contribution to the social science literature on uncertainty. It is one of the few sociological works to address uncertainty directly and systematically, drawing on a wide range of literature to focus on issues often neglected in studies of uncertainty and risk. It is essential reading, I feel, especially for those interested in understanding what Aspers calls "public means of uncertainty reduction": public knowledge, including formal and informal institutions, and forms of evaluation, which mitigate or could help mitigate the impact of uncertainty in everyday life. The book analyzes these forms in terms of "states of the world", that is, shared assumptions about the world that do not have to be true and accurate, but must be "publicly known, socially constructed, and consensual" (p. 3).

The book paints a picture of an uncertain world that is effectively kept in check by public means of uncertainty reduction, and increasingly so in modern society. However, in so doing, it also raises a number of follow-up questions: Do we not also live in a world of manufactured uncertainties? Are not the same modern institutions and forms of valuation that (are supposed to) reduce uncertainty also used to create and intensify uncertainty? If so, how useful is it really to focus on reducing uncertainty when analyzing such institutions and forms of valuation? Can we really understand how uncertainty reduction works if we do not also pay attention to the production and changing perceptions of uncertainty?

The following observations will try to explain the motivation for and possible implications of these questions. In the spirit of reflexivity, I should preface them by saying a few words on my own background. I am not an expert in the field of uncertainty studies, but rather a card-carrying sociologist working in the fields of social theory and historical sociology. Among my empirical research interests are globalization, nationalism, and competition. In particular, the focus on competition sparked my interest in the history of rankings, which we have been studying for a few years now with a group of scholars, looking at the emergence, institutionalization, and impacts of rankings in various fields (for insights into our journey in this line of research, as part of an attempt to "theorize together", see Werron et al., 2024). These research experiences have certainly shaped my reading of Aspers' book and I will refer to them below to empirically illustrate my argument.

The essay starts with a few remarks on what seems to me to be the main contribution of the book to the ongoing interdisciplinary discussion of uncertainty. The critical discussion in the second section aims to show that the forms of public knowledge that Aspers analyzes in terms of reducing uncertainty, and in particular the "forms that generate states of the world" discussed in chapters five to seven, should also be understood as forms of generating and specifying uncertainty. It also argues that attention should be paid to historically changing expectations of (un)certainty, which co-determine whether public knowledge is experienced as effectively reducing, producing or otherwise specifying uncertainty. Taking such issues into account would not only make the story more complete, but also change the book's message about means of uncertainty reduction. Some final remarks conclude the essay.

# 2 What the Book Brings to the Table: Introducing Institutionalist Thinking to the Study of Uncertainty

The starting point of the book is that it suggests understanding uncertainty as an *epistemic* issue linked to the question of knowing or not knowing. In this understanding,

uncertainty is caused by lack of knowledge. If there are no states of the world, we cannot know whether our actions will lead to the ends we aim at. The underlying criterion of the state of uncertainty is epistemic, which means that we do not know which of these states is, or will be, the correct one (Aspers, 2024, p. 5).

In Aspers' understanding, this implies a rather clear distinction between uncertainty and risk. In contrast to risk, which is associated with measurable and quantifiable outcomes, uncertainty here is defined as a fundamental problem of social life.

Aspers argues that much of the extant literature tends to equate uncertainty with risk and to reframe it in terms of quantified probabilities. For him, uncertainty offers the opportunity to focus on a much broader set of phenomena. He therefore argues that, while uncertainty can sometimes be redressed in terms of risk by attaching numbers and probabilities to unknown outcomes, it should not be reduced to such instances (for a similar, instructive view that defines uncertainty as one of four dimensions of "incertitude", next to risk, ambiguity and ignorance, see Stirling, 2010; Scoones, 2024). This distinction manages to achieve what Andy Stirling (2010), another uncertainty scholar, nicely describes as "avoiding the temptation to treat every problem as a risk nail, to be reduced by a probabilistic hammer" (p. 1029).

Aspers uses these conceptual ideas to focus on social phenomena that often receive little attention in research on uncertainty. His major contribution to the debate on uncertainty seems to me to lie precisely in the fact that he brings in fundamental themes in the sociological and anthropological literature — informal and formal institutions, forms of evaluation and valuation — which are not usually associated primarily with questions of uncertainty. This approach pays particular dividends in the chapter about institutions (in the sociological sense of the term). Aspers argues here that informal institutions, with their taken-for-grantedness in everyday life, provide certainty and reduce uncertainty in the sense that they help us "to know how to behave and act in relation to them, and we can also predict how others will act" (Aspers, 2024, pp. 40–41). The informal institution "shake hands to greet people", for instance, is not only an instruction to ourselves, it also gives us some certainty that our greeting will be returned.

Building on a broad range of institutionalist ideas from various sources, including Peter Berger and Thomas Luckmann, Alfred Schütz, Martin Heidegger and Niklas Luhmann, to mention a few, Aspers (2024) goes on to discuss basic dimensions of social life such as trust, values, language, and societal expectations as examples of how institutions create certainty in human interaction. The success or failure of implementing *formal* institutions, such as laws, he argues, can also be seen as a test for how well informal institutions work as the "societal bedrock" (p. 42) that let formal institutions appear more or less plausible and binding. Usually, we do not think about the certainty granted by institutions, precisely because institutions are usually taken for granted. Ironically, therefore, it is the same characteristic that likely explains why informal institutions are usually not considered in the literature about uncertainty: apparently this literature, too, tends take the existence of social institutions for granted. Sociologists, on the other hand, are trained not to be fooled by the apparent naturalness of institutions, and, as Aspers shows, they can use this training to call attention to institutions as neglected instruments for dealing with uncertainty.

What is specific about Aspers' perspective becomes clearer when compared to other recent approaches to similar issues. Take, for example, the recent book *Navigating Uncertainty* by Ian Scoones (2024). Scoones, a trained biologist, starts with a similar conceptual understanding of uncertainty, insisting that uncertainty should not be reduced to the study of quantifiable and

"objectifiable" risk. Similar to Aspers, he also uses this understanding to draw attention to alternative means of dealing with uncertainty that are usually not included in the imaginative realm of navigating risk — such as traditional ways of organizing cattle markets that might inspire new approaches to organizing financial markets — and to criticize institutional arrangements that tend to think about disasters solely in terms of "techno-managerial solutions" (Scoones, 2024, p. 111). In these regards, there are clear overlaps between these approaches. Both are looking for alternatives to the widespread reduction of uncertainty to risk.

But there are important differences, too. Unlike Aspers (2024), Ian Scoones looks at a range of research topics and political challenges (financial markets, technology, critical infrastructure, pandemics, natural disasters, climate change) that tend to occupy scholars working on uncertainty and that many readers presumably expect from a book of this title. Some readers will miss a detailed discussion of these topics in Aspers' book. On the other hand, it is Aspers who shows and emphasizes that dealing with uncertainty is fundamental to any kind of social life. Highlighting the apparent naturalness of institutions, their matter-of-factness in everyday life, proves particularly productive here. In so doing, Aspers makes clear that from a sociological perspective the analysis of uncertainty requires treatment on a deeper level, one that accounts for how we imagine, as Aspers' puts it, the "states of the world" in which social life takes place. Any attempt to help control or manage uncertainty is well advised to take these insights into account.

### 3 Uncertainty Reduced, Produced, and Specified

If the strength of the book is to draw attention to fundamental social institutions, then my main criticism is that it focuses exclusively on the analysis of public knowledge in terms of *reducing* uncertainty. This is partly, I feel, because it makes too little distinction between knowledge and certainty. Knowing something is not the same as being certain about it. Much of the public knowledge discussed in the book is actually of the kind that the degree of certainty associated with it varies greatly and is partially undermined by its very "publicness". This applies in particular to the various forms of evaluation discussed in chapters five to seven. While it is possible and perfectly plausible to argue that social institutions are primarily about reducing uncertainty, <sup>1</sup> the same cannot be said of these forms of evaluation. On closer examination of how they work, it becomes clear that they are also in the business of *creating* uncertainty, and that it is, in many cases, impossible to arrive at an overall assessment of whether they lead to more or less uncertainty.

#### 3.1 Rankings and the Creation of Uncertainty

Take the example of rankings (discussed in chapter six): Can they really be characterized as states of the world in Aspers' sense, that is, "publicly known, socially manufactured, consensual, because they can be used by many to make decisions with less uncertain outcomes" (2024, p. 3)? Is it apt to say that there "is no doubt that rankings can be used by actors to make decisions with reduced uncertainty" (p. 127)?

<sup>1.</sup> It is possible to understand institutions even more radically by moving away from questions of uncertainty. In this understanding, social institutions are not primarily a matter of knowing them, or being sure about them, but of *assuming* that and behaving as if they were accepted by anonymous others (Luhmann, 1970). From this perspective, it can be argued that institutions *replace* certainty with assumptions about acceptance; in so doing, they provide orientation, but not necessarily certainty.

It is true that rankings have become a highly institutionalized form of knowledge in many fields (Ringel & Werron, 2020; Brankovic et al., 2023). In the field of higher education, for example, we can assume that most university administrators, academics and students are aware of the existence of university rankings, and that it is widely known that these rankings claim to evaluate the performances and "excellence" of universities, that they are published regularly and produce more or less variable results. In this sense, university rankings are public knowledge. However, this does not necessarily imply that they can be used to make decisions with less uncertain outcomes. In fact, I find it difficult to understand what the expression "less uncertain outcome" could mean in this context. Rankings may provide those being ranked with information about how they are observed by others (Esposito & Stark, 2019); in some contexts, they may provide some members of the audience with reputation markers that can help them in making decisions such as choosing or funding a university. However, such information does not make the *outcome* of a decision more certain; it merely helps to arrive at a decision or legitimize it. Whether this leads to the desired outcome is another question. In short, rankings may be described as public knowledge that offers "orientation in the face of uncertainty", as Elena Esposito and David Stark (2019) argue, but they do not necessarily provide certainty.

Furthermore, rankings create additional uncertainty. For example, university rankings confront university administrations with the idea that they are part of a constantly changing competitive field (Brankovic et al., 2018) and with the uncertainty of what they should do to improve their ranking. This implies further uncertainties, such as of how to get other members of the organization, particularly teachers and researchers, to adapt their behavior to the criteria of the rankings. As "serial" practices of comparison, rankings depict the units evaluated as being in a state of constant change, based on *repeated* evaluation and publication (Brankovic et al., 2018; Ringel & Werron, 2021). Rankings therefore present the competitive environment as dynamic and the assessed units as constantly changing in relation to each other, thus suggesting that change is normal and expected. Each new publication of the ranking is designed to raise the question who has risen and fallen. For this reason, not just the ranked organizations but also the audience may experience this as an increase in uncertainty: How can one be sure that the ranking of today will still be valid tomorrow, and that decisions taken on the grounds of the ranking of this year won't look foolish based on next year's ranking? Can decisions with long-term consequences really be based with any degree of certainty on such a flexible form of evaluation? And again, in the face of these additional uncertainties, what sense does it make to say that decisions made on such bases have "less uncertain outcomes"? Would it not be more accurate to say that rankings transform, produce and specify uncertainty in a way that urges the evaluated entities to accept and deal with various uncertainties?

#### 3.2 "Publicness" and the Implicit Production of Uncertainty

This leads to a more general point: Speaking and acting *publicly* means addressing an anonymous audience whose individual members are unknown and whose reactions can only be approximately anticipated. Thus, the very idea of the public is associated with an unavoidable uncertainty.

To arrive at this realization and think through its consequences, we need to move beyond a structural notion of public knowledge — in the sense of something that already exists and is available to everyone — and consider the public as a *communication process*, whereby public knowledge is regarded as something that is constantly being produced and reproduced in public discourse (Warner, 2002; Werron, 2020). Public knowledge in this sense has both a discursive

and a temporal existence: In public discourse, claims to truth meet with criticism and divergent claims to truth that cast doubt on them, and the ongoing clash of conflicting positions opposes any claim to certainty. For this reason, public knowledge is subject to constant change, and the direction of this change is uncertain. This raises the question of how public knowledge is produced and how the production of public knowledge goes hand in hand with the production of uncertainty.

Returning to the example of rankings and similar forms of evaluation, it can be shown that uncertainties arise from the very publicness of these forms. This is why rankings can hardly be described as "consensual", in terms of Aspers' (2024) understanding of states of the world. Rankings may claim to evaluate and compare performance "objectively" and often try to substantiate this with elaborate methodologies. However, these claims are frequently, and increasingly so at present, called into question (for a discussion of recent examples see Hamann & Ringel, 2023; Brankovic et al., 2023). Not only are the rankings institutionalized, but so is the criticism of them. In some areas, especially higher education, the criticism has reached such an intensity and volume that it has almost caught up with the visibility and influence of the rankings, partly undermining their institutionalization (albeit sometimes with paradoxical consequences; cf. Hamann & Ringel, 2023). This relativizes the idea that rankings reduce uncertainty and underlines that they participate in the logic of public communication and the uncertainty associated with it.

#### 3.3 Scientific Knowledge: In-built Uncertainties and Unintended Consequences

The same might be said about other kinds of public knowledge and the (un)certainty it may or may not provide. Perhaps the best example of this is scientific knowledge. Aspers argues that "the growth of scientific knowledge in all areas — from medicine, technology, natural sciences, and social sciences, including their corresponding domains of practical applicability, such as health care, optics, and organizational leadership — has contributed to the reduction of uncertainty." It follows for him "that the uncertainty about one's life and well-being is less acute than it was when witchcraft was the means of uncertainty reduction" (2024, p. 12). With such formulations, the book comes dangerously close to old-fashioned, simplistic modernization narratives that ignore both (a) the uncertainties built into the production of modern knowledge and (b) the additional uncertainties it creates.

(a) As has been argued many times, the point of modern science is not that it creates certain knowledge; on the contrary, it works in such a way that it regards all knowledge as provisional and fallible (for a recent, cogent account, see Firestein, 2012). The everyday understanding that modern science has produced more and more certain "facts" is based on a social structure of "organized skepticism" (Robert K. Merton), which aims to cast doubt on all knowledge ever produced. This does not, of course, preclude the fact that scientific knowledge and the technologies that were developed on its basis are often taken for granted in everyday life and can thus today be considered "states of the world" (in Aspers' sense). Yet this should not be confused with the assumption that scientific knowledge has provided us with more certainty overall. That witchcraft and similar cultural practices seem inadequate to us today does not deny that earlier societies accepted them as producing "states of the world" that conveyed certainty on par with what the modern sciences provide today. If reducing uncertainty is based on institutionalized assumptions about the world, and not on the accuracy of those assumptions, then evaluating the effectiveness of previous forms of uncertainty reduction can hardly be based on our current

knowledge (which, as the epistemology of modern science tells us, might be wrong anyway). Such a view does not sufficiently distance itself from an everyday understanding of scientific knowledge that wrongly identifies it with the production of "facts".

(b) The point becomes even clearer when the unintended side effects of scientific knowledge are included in the analysis. Witchcraft and similar techniques may not seem to us to be particularly effective methods of understanding and manipulating the natural environment. On the flipside, they did not have the unintended consequences of modern scientific knowledge and technologies, which are often at the heart of today's most talked about "global challenges" (see Isakowa et al., 2024), such as climate change, the risk of nuclear war, or the extinction of species. These challenges arguably confront mankind with unprecedented uncertainties; or, to be more precise: the social construction of "global challenges" as serious social problems implies the construction and perception of additional uncertainties. In view of this impact of scientific knowledge, many people, myself included, will find it difficult to accept the idea "that uncertainty about one's life and well-being is less acute than in the days when witchcraft was the means to reduce uncertainty" (p. 12). Instead, it may be preferable to accept the *ambivalence* of modern science when it comes the reduction or production of uncertainty. Rather than providing one at the expense of the other, it seems as if it does both, often at the same time.

All of this suggests that modern public knowledge tends to foster certainty and uncertainty simultaneously. Any reduction in uncertainty tends to be accompanied by the emergence of new uncertainty. Instead of focusing exclusively on how public knowledge reduces uncertainty, we should therefore try to improve our understanding of how public knowledge simultaneously produces certainty and uncertainty, and analyze the resulting mixtures of certainty and uncertainty more closely.

#### 3.4 Expectations of (Un)certainty

I would like to present a final argument that contradicts the notion that more public knowledge effectively reduces uncertainty. The general point is that the experience of (un)certainty must be understood in its specific social and historical contexts. Members of early societies may still have been able to believe unconditionally in cultural techniques such as witchcraft, and thus benefit from the certainty that such belief can bring. Today we are bombarded daily with news, novels, films, sociological analyses and other cultural products that educate us about the relativity of our knowledge, the unintended consequences of scientific knowledge and the risks and dangers of civilized life. In such a world, public knowledge is reflexive, including the uncertainties it carries. All meaning and social structure tend to be experienced as contingent in the philosophical sense of the word, that is, as neither impossible nor necessary (Luhmann, 1992). It is hardly plausible to assume that uncertainty is perceived as less acute overall in such a world. Rather, we should try to understand more precisely how the reflexivity of knowledge and the perception of uncertainty are incorporated into the social experience of uncertainty.

To prepare such investigations, what we can say with some certainty is *that each knowledge claim creates a new possibility for being certain or uncertain about something*. It can be accepted or rejected, accepted by some and rejected by others. Whether it is associated with certainty or uncertainty depends on the social contexts in which it occurs and on the reflexive relationships between knowledge claims and types of knowledge. These social contexts create expectations that determine whether a particular piece of knowledge is accepted or not, and whether we

experience some knowledge as more or less certain. This implies the insight that (un)certainty is always experienced in relation to more or less specific expectations of (un)certainty.

It therefore makes little sense to talk about the logic and long-term consequences of uncertainty reduction without taking these expectations into account. Earlier societies lived in a world that may seem more uncertain to us today. However, this is because our expectations of certainty and our tolerance of uncertainty differ from theirs. In the past, people were not yet aware of specific dangers in life and social problems that are known today, and religious beliefs may have provided a sense of certainty that is no longer available to many of us today. On the other hand, we are confronted with uncertainties about which earlier societies were blissfully ignorant, like the "global challenges" mentioned earlier, such as climate change, the collapse of financial markets, the erosion of democracy, the extinction of species or the dangers of nuclear war. We expect us to be able to describe, analyze, and overcome these challenges, and in doing so, we have created a social context in which they appear to us as sources of uncertainty.

To illustrate this point again using the example of rankings: Studying the history of rankings in terms of their ability to reduce or create uncertainty requires an interest in how ideas of merit, performance and similar "meritocratic" ideas have developed over time. Expectations based on such ideas, like the idea of the "champion" in sports or that of "scientific excellence", have contributed to rankings becoming an accepted and largely institutionalized means of quantifying and measuring performance in various fields (Minnetian & Werron, 2021; Wilbers & Brankovic, 2023). At the same time, as outlined above, they have inspired the emergence of a tradition of *criticism of rankings*, whose proponents point out that rankings tend to fall short of their promise of measuring and enhancing actual performance. In other words, rankings have become an integral part of a meritocratic imaginary that also feeds the criticism of rankings. When it comes to uncertainty, the result can only be described as ambivalent: The development of meritocratic expectations since the 19<sup>th</sup> century helps to explain the rise and institutionalization of rankings, while at the same time limiting the degree of certainty that rankings generate.

Similarly, if a railway system has been set up in which trains run according to a regular timetable, our focus is no longer on whether we can travel from A to B (which is now fairly certain), but on the regularity and punctuality of the system. But trains that are a few minutes late might create just as much uncertainty and turmoil as canceled trains in a system with a less specific timetable. What carries more weight, certainty in one respect or uncertainty in the other? Again, it is hard to see how this question could be answered in general terms and without taking the social context into account.

Such examples help explain why a book like Aspers' (2024), which emphasizes the ability of modern knowledge to reduce uncertainty, can coexist with an ongoing discourse on the "risk society" that focuses on how modern knowledge and technology create uncertainty. One could argue that both are right and we just need to bring them together to get the full picture. However, as shown above, modern institutions and discourses not only reduce and create uncertainty, but also generate and specify expectations of (un)uncertainty. This undermines any attempts to "objectively" assess whether there is more or less uncertainty. As I see it, there is simply no way to create a balance sheet that allows the conclusion that the reduction of uncertainty has exceeded the generation of uncertainty. We can, however, draw heuristic benefit from these considerations: To discuss the ways in which and the extent to which modern institutions reduce or create uncertainty, we need to examine how such expectations arise, how they are institutionalized, how they change, and how this affects the perception of (un)certainty.

#### 4 Conclusion

Patrik Aspers (2024) clearly shows that a sociological study of uncertainty that does not reduce it to calculable risk is promising. At the same time, his focus on the reduction of uncertainty through public knowledge limits his interest for how the same forms of public knowledge contribute to the production of uncertainty, in effect limiting what we can find out about how the reduction of uncertainty actually works. It seems necessary, then, to bring Aspers' approach together with other strands of research into uncertainty that also avoid reducing uncertainty to risk, but focus on other dimensions of dealing with, reducing, creating and navigating uncertainty. As Ian Scoones (2024) argues in his recent book, this should include expanding our imagination and paying attention to local tradition and practices, thus exploring ways to creatively navigate uncertainty that go beyond "objective" risk management. Furthermore, as argued here, it should include examining the unintended side effects of public knowledge, analyzing how the creation of uncertainty is built into the reflexivity of modern knowledge production, and investigating the expectations that determine whether we perceive knowledge claims as more or less uncertain. If the goal is to develop cultural techniques to effectively navigate the uncertainty that reigns in the complex world we all live in, then all the analytical tools should be on deck.

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