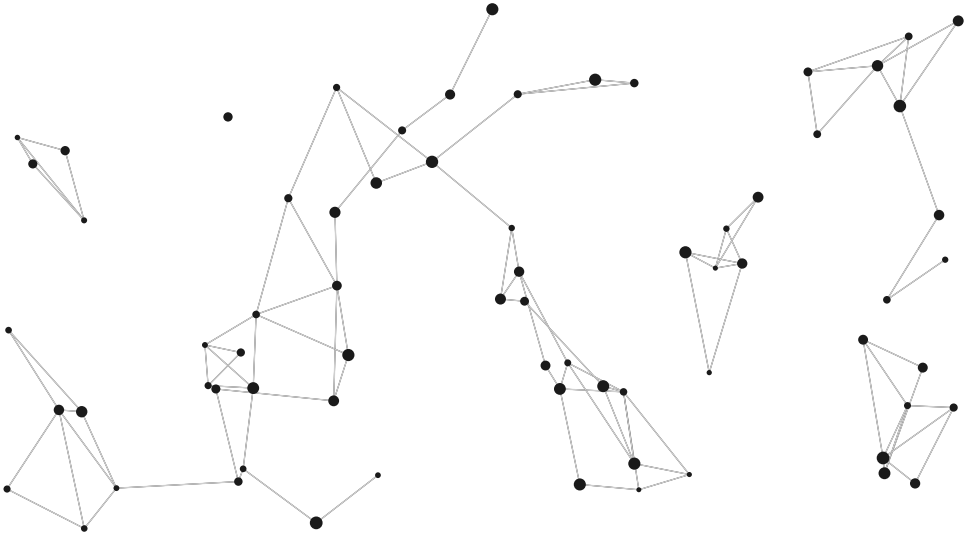




F. A. HAYEK

THE USE OF KNOWLEDGE IN SOCIETY

A plain-language adaptation
by Sonal Kuruvilla

A NOTE ON THIS ADAPTATION

This is a plain-language adaptation of F. A. Hayek's 1945 essay, *The Use of Knowledge in Society*. I wrote it because some of my students told me they find it hard to read. I remember feeling the same way when I read it for the first time. This essay is too important to be skipped, and I hope a simpler version might help more people reach it.

I have followed Hayek's argument in the order he makes it, but this is not a word-for-word translation. I have left out some sentences, reworded others, and added a few examples of my own. These examples are mine, not Hayek's. Any mistakes or oversimplifications are my responsibility, not Hayek's.

This document is a way into the essay, not a replacement for it. The best option is to read the original, which is short and freely available.

SONAL KURUVILLA

ABOUT THE ESSAY

Friedrich Hayek published *The Use of Knowledge in Society* in the September 1945 issue of the *American Economic Review*. Hayek was born in Vienna in 1899. By 1945 he was teaching economics at the London School of Economics, and he had become a British citizen in 1938.

The essay appeared as the Second World War was ending. The war in Europe had finished in May, and Japan surrendered that August. The world had just lived through the Great Depression and then a war in which governments in many countries directed their economies closely, deciding what to produce and how to ration it. The Soviet Union, which had been running five-year plans since 1928, was seen by many people as proof that a whole economy could be planned. Many economists and politicians in the West, and in countries soon to be independent, such as India, expected planning to continue after the war. In India, for instance, a group of industrialists had published the 1944 “Bombay Plan” calling for state-led economic planning.

Economists had been arguing about this for decades in what is called the “socialist calculation debate”. Hayek had joined it as an opponent of central planning. In the 1930s, the economist Oskar Lange proposed that a central planning board could set prices and reach efficient results without markets. Hayek’s essay is a direct answer to arguments of this kind. It does not simply say that planning is bad. It asks what knowledge any planner needs, and where that knowledge actually is.

The essay was widely noticed and has stayed influential. In 2011 it was chosen as one of the twenty most important articles published in the *American Economic Review* in its first hundred years. Hayek was awarded the Nobel Memorial Prize in Economic Sciences in 1974.

THE USE OF KNOWLEDGE IN SOCIETY

F. A. HAYEK

Think about an economy. It has limited resources. The people in it have different preferences. How should these resources be allocated among their different uses? We want an economic system that makes the best possible use of scarce resources to satisfy people's preferences. Let's call the best possible allocation of those resources a **rational economic order**. So how do we create such a rational economic order?

To answer this question, let's make an assumption: we possess all the relevant information. That is, we already know people's preferences and keep them fixed, and we know what resources are available and what we can do with them.

Once we make these assumptions, the answer to our question becomes simple. If we already have all the relevant information about preferences and available means, then creating a rational economic order is simply a matter of **reasoning and calculation**. In other words, we only need to reason through or calculate how to allocate the available resources among their different uses to satisfy people's preferences as well as possible.

But do our assumptions hold up to the reality in society? To calculate resource allocation, the relevant information needs to be available to the person doing the calculations. **But this information is never available to a single mind, and could never be.**

This is what makes the problem of a rational economic order peculiar. The knowledge we need never exists in a concentrated form. It is scattered among individuals in bits of incomplete and frequently contradictory knowledge. So the economic problem is not simply how to allocate resources when all the relevant information is available to one person. It is about making the best use of the resources and knowledge spread across different people, when no single person possesses all the knowledge needed.

I believe many current disagreements about economic theory and policy arise from a common misunderstanding of the economic problem society faces. This happens because we apply ways of thinking developed to understand the natural world to problems in society, even though the two are different.

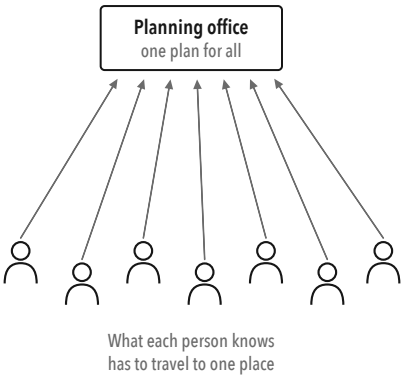
The word “planning” can be used to describe the interrelated decisions we make about the allocation of our available resources. All economic activity is, in this sense, planning. In a society where people work together, whoever makes the plans, whether a government office or an individual farmer, will need knowledge that is scattered among people. This knowledge must be communicated to the planner. How this knowledge is communicated is central to any theory explaining the economic process. And figuring out how best to use the knowledge spread across different people is a key problem in designing economic policy and an efficient economic system.

This is closely connected to another question: who is supposed to do the planning? All disputes around economic planning centre on this question. The dispute is not about whether planning should be done. It is about whether planning should be centralised or decentralised. **Central planning** is when the direction of the whole economic system is determined by one unified plan. **Competition**, on the other hand, is decentralised planning by many separate persons.

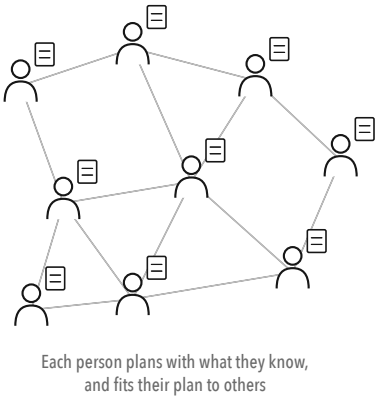
Imagine, for example, how food reaches the shops where we buy it. Under central planning, the government decides how much rice and vegetables should be produced, who should produce them, and where they should be sold. Under competition, or decentralised planning, different farmers and businesses decide on their own what to grow, how much to produce, and where to sell it, and they compete to attract customers.

Which of these systems is likely to be more efficient? The answer depends on which system makes better use of existing knowledge. To figure this out, we need to ask: are we more likely to succeed in bringing all the knowledge scattered among different individuals to a

CENTRAL PLANNING



DECENTRALISED PLANNING



single central authority, or in giving individuals the additional knowledge they need to align their plans with those of others?

The answer to our question will differ depending on the kinds of knowledge involved: the knowledge that is more likely to be available to individuals, and the knowledge that is more likely to be available to an authority made up of experts.

Consider food production. A farmer knows that a particular field has become less fertile, or that local customers suddenly prefer a certain vegetable. This is knowledge held by individuals. Agricultural experts, on the other hand, may know which crops generally grow best in a region, based on scientific research and wider data. This is knowledge held by experts or authorities.

Today, it is generally assumed that experts and central authorities are better at planning because scientific knowledge is highly valued. **But have you considered that scientific knowledge is not the sum of all knowledge?**

There is a very important kind of knowledge that is not organised into general rules or scientific principles. This is the knowledge of the particular circumstances of time and place. **When it comes to this kind of knowledge, practically every individual has an advantage over others because they possess information that others may not have.** This information can be put to beneficial use only if the decisions that depend on it are left to that individual or made with their active cooperation.

We can see the value of this knowledge in almost every occupation. For example, even after completing theoretical training, we still have a lot to learn when we start working in a particular job. Much of our working life is spent learning the specifics of our work. Knowing people and local conditions can be valuable in almost any occupation.

SCIENTIFIC KNOWLEDGE



General rules and principles
true in many places at once
Can be written down,
taught, and gathered
by experts

KNOWLEDGE OF TIME AND PLACE

☒ This field has become less fertile	☒ A machine is sitting idle
☒ Customers here want a new vegetable	☒ A supplier has surplus stock
☒ A truck will return empty	☒ A seller must sell this week
☒ The rain came late	☒ This road is closed today

Scattered among many people, each knowing a little

This knowledge can be useful in practical situations. Knowing that a factory machine is sitting idle can help in putting it to use. Knowing that a supplier has surplus stock can prevent a shortage. Such knowledge can be just as valuable as knowing a better production technique. Consider a truck operator who finds goods to carry on a return journey that would otherwise be empty, or a real estate agent who connects someone urgently selling a property with a suitable buyer. These people perform useful functions by acting on specific knowledge of circumstances and opportunities that others may not possess.

But strangely, this kind of practical knowledge is often looked down upon. People who gain an advantage through it, rather than through theoretical or technical expertise, are sometimes seen as having acted dishonestly. For example, someone who profits by knowing better transport routes or communication facilities may be viewed with suspicion. Yet making the best use of these opportunities is just as important as making use of the latest scientific discoveries.

Even economists make this same mistake. They treat the work of acquiring such knowledge as unimportant, because in their models all knowledge is simply given. So when this knowledge is not available to everyone, they see it as a failure of the economic system. But this overlooks the real challenge: how do we make such knowledge widely available? That is precisely the problem we need to solve.

As we have seen, too little importance is given to the knowledge of the particular circumstances of time and place. This is closely related to another mistake: underestimating how often circumstances change.

For example, imagine a farmer who plans to grow rice. But what if rainfall is lower than expected? Or if demand for rice suddenly falls? The farmer may have to change his plans.

In fact, one of the biggest differences between those who favour central planning and those who oppose it is how much importance they give to these changes. Think about it. If detailed long-term economic plans could be made and followed carefully, without requiring major changes along the way, planning would be much easier, and so would creating a single plan for the entire economy.

But we should understand something about economic problems: **they arise always and only because of change**. So long as things continue as before, or as expected, no new economic problems arise that require us to make decisions or change our plans. In fact, many who underestimate the importance of change also argue that economic problems have become less important as technological knowledge has advanced.

For example, consider a factory that uses modern machines to produce clothes. Technical knowledge tells us how to produce clothes using machines. But economic decisions are different. How many clothes should the factory produce? How many workers should it employ? Where should it buy raw materials from? These decisions depend on circumstances that keep changing. One might assume that advances in technology make such economic decisions less important. But is that really the case?

Someone with practical experience in business, I think, will answer no. In a competitive industry, keeping costs down is a continuous struggle. A factory manager must constantly decide how many workers are needed, where to buy materials at the best price, and how much to produce. Poor decisions can quickly increase costs and reduce profits. Even two factories using the same machines and technology can produce clothes at very different costs.

Probably one reason why economists forget about these small changes in everyday circumstances is their growing focus on statistical aggregates. These are overall figures, such as the total production of clothes in a country. Such figures may appear stable even when circumstances in individual factories are constantly changing.

Some might explain this stability through the law of large numbers. This is the idea that when we observe a large number of independent, random events, their average tends to become more predictable. Another explanation is that random changes cancel each other out. For example, a fall in production at one factory might be offset by an increase at another.

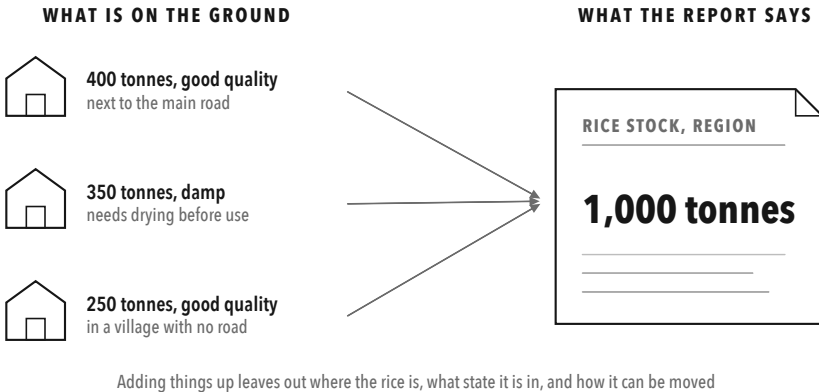
But these explanations are not enough. The number of elements involved is not large enough for such accidental forces to produce stability on their own. The continuous flow of goods and services is not maintained by chance. **It is maintained through deliberate adjustments made by people every day.** People respond to new circumstances that they could not have predicted the day before.

Even a large, mechanised factory depends on other businesses to meet unexpected needs and keep production running. Consider our clothing factory. One morning, its regular fabric supplier fails to deliver. The factory manager quickly finds another supplier. On another day, a machine breaks down, and a nearby business provides the spare part.

The factory keeps running because other businesses are available to meet its changing needs.

The kind of knowledge I am talking about cannot, by its very nature, be fully captured in statistics. So it cannot be communicated to a central authority through statistical reports.

Why is that? Statistics are created by grouping things together. In doing so, we often ignore the small differences between them. For example, a report might say that a region has 1,000 tonnes of rice. But it may not tell us where exactly the rice is stored, what its quality is, or how easily it can be transported. These differences may be very important when deciding how to use that rice.



This means that central planning based on statistics cannot fully account for the particular circumstances of time and place. A central planner must therefore find some way to leave decisions that depend on such knowledge to the people who possess it. In other words, **some decisions must be left to the people who know the particular circumstances.**

Can we agree that the economic problem of society is mainly about adapting quickly to changes in the particular circumstances of time and place? If so, it follows that decisions must be left to the people who are familiar with these circumstances. We cannot solve this problem by communicating all this knowledge to a central planner, who then puts it together and issues orders. We must solve it through some form of decentralisation. But this only solves part of our problem.

We need decentralisation because it allows people to make quick use of their knowledge of local circumstances. But here is the other part of the problem. These individuals cannot make decisions based only on what they know about their immediate surroundings. They also need information about what is happening elsewhere in the economy. **How do we get this additional information to them so that they can adjust their plans to fit with those of others?** Of all the things happening elsewhere in the economy, which ones matter for the decisions they make? And how much do they really need to know about them?

Almost anything that happens anywhere in the world could affect an individual's decisions. But they need not know about all these events. What matters is knowing which resources have become harder or easier to obtain, and which products are now more or less in demand. In other words, what matters is their **relative importance**. The reasons behind these changes are less important than how they affect the individual's decisions.

For example, a factory manager does not need to know why one type of screw is in greater demand than another, or why paper bags are easier to find than cloth bags. If cloth bags become harder to obtain, the manager may switch to paper bags instead. What matters is the change in their relative availability, not why it happened.

This is where the price system comes into the picture.

Consider our clothing factory. It uses cotton to produce shirts. Now, suppose a poor harvest makes cotton scarcer, causing its price to rise. The factory manager may not know why this happened. But the higher price tells the manager something important: cotton has become more valuable relative to other resources. The manager might now use less cotton, switch to another material, or reduce production.

This is how prices communicate the relative importance of scarce resources. The price of cotton does not depend simply on its physical properties. It reflects its scarcity and the competing demands for its use.

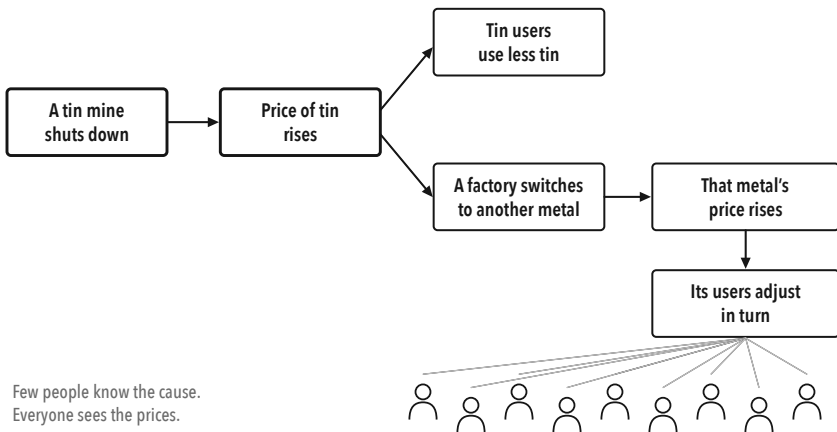
The factory manager does not need to know who else needs cotton or how much they need. The price already reflects these competing demands. **Prices bring together information about resources and their different uses into numerical values.** They allow people to make adjustments without knowing all the circumstances behind those values or having to calculate everything from the beginning.

Fundamentally, in a system where knowledge is scattered among many people, prices can help coordinate their individual decisions.

Let's look at another example to understand how the price system works. Imagine that tin, a metal used to make various products, suddenly becomes scarcer. This could happen because a major tin mine shuts down, reducing supply, or because a new industry starts using more tin, increasing demand. Either way, the price of tin rises. People who use tin do not need to know why its price has increased. They only need to know that tin has become more valuable for other uses. So they try to use less of it or find alternatives.

Now imagine a factory switching from tin to another metal. This increases demand for that metal, which may cause its price to rise. Other businesses using that metal may then look for alternatives. In this way, one change sets off a chain of adjustments across the economy. Some people respond directly to the original change. Others respond to the changes caused by their decisions. Most of them may never know why tin became scarcer in the first place. Yet all these decisions are connected through prices. **No single person needs to know everything happening across the economy.** Each person responds to the prices and circumstances relevant to their own decisions.

ONE CHANGE, A CHAIN OF ADJUSTMENTS



To see the real function of the price system, we must look at it as a way of communicating information. Its greatest strength is how little people need to know to make good decisions. Prices communicate only the essential information to those who need it. Producers can watch changes in prices and adjust their decisions without knowing what caused those changes. But when prices cannot adjust freely, they become less effective at communicating information.

Of course, these price adjustments are never “perfect” in the way economists imagine in their theoretical models. But I fear that looking for “perfect” models has made us blind to the true function of the price mechanism.

This is the marvel of the price mechanism, and I hope all of us can appreciate it: **when a raw material becomes scarce, without anyone issuing orders, and with only a handful of people knowing the cause, tens of thousands of people who do not even know one another begin using that material more carefully.** This is remarkable enough, even if, in a constantly changing world, not everyone adjusts perfectly.

I have used the word “marvel” deliberately, because we often take the working of the price mechanism for granted. If the price mechanism were something we had designed or invented, it would have been acclaimed as one of the greatest triumphs of the human mind.

Those who clamour for central planning should remember this: the real challenge is to make effective use of resources across an entire economy, when no single person can know or control everything. We need a system where people can make decisions without anyone having to tell them what to do.

The idea that people can benefit from knowledge they do not individually possess is not unique to economics. Think about language. We do not need to understand how it developed or know all its rules to communicate with one another. Yet language allows us to benefit from knowledge developed and shared by countless people over generations. The same is true of many rules, practices and institutions in society. They help us make use of knowledge that we do not individually possess, often without fully understanding how they work.

Similarly, the price system is one of those systems that humans stumbled upon and gradually learned to use, even without fully understanding how it worked. We are still far from making the best use of it. The price system has made it possible for people to specialise in different kinds of work and coordinate their use of resources, even though knowledge is scattered among them. In fact, our civilisation developed as it did partly because this system made such coordination possible. So far, nobody has designed another system that allows people the same freedom to choose their work and use their own knowledge and skills.

THE ORIGINAL ESSAY

F. A. Hayek, “The Use of Knowledge in Society”, *American Economic Review* 35, no. 4 (September 1945): 519–530.

The original is short and freely available, and is well worth reading in full.