

The Efficient Use of Local Knowledge (Which You Don't Have)

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Abstract

When engaging in an unknown situation without full information, proxies are used to increase the information set. Although the psychology literature claims that people following others doing unique tasks is perceived to be irrational, this study argues a different view. I provide a rational explanation for the efficient use of local knowledge. When entering an unknown circumstance, utilizing the information we gain from the other people in that situation optimizes our behavior – it is rational to follow the observable optimization from the locals. The efficient use of local knowledge explains why so many people have failed psychology studies.

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I. Introduction

You are driving down a road you have never been on. There is a puddle in the traffic lane along the right side. You don't know why, but you notice everyone in front of you is driving around the puddle (not through the puddle). According to the psychology literature, if you follow the pattern of other people, you would be listed as making the wrong choice – you should drive through the puddle (the Psychology of Conformity, discussed later) because they argue that following people's actions with no reason to do so is illogical. But as an economist, you admit that these drivers seem to have information that you do not have, some local knowledge about the area that you are not privy to (as you have never been here before). As such, you also drive around the puddle.

As a researcher, after passing the puddle, you continue to wonder if you made the right decision – because you do not know why you drove around instead of through the puddle. So, while watching in the rearview mirror, you are ecstatic to find you made the optimal choice as the car behind you ignores the local knowledge, drives into the puddle, and you hear a big smash as they drive through a massive pothole (for which has been masked by the puddle). Although the psychology literature claims that people following others doing unique tasks is perceived to be irrational and unexplainable behavior, this study argues a different view. As an

economist, I know that occasionally I do not know – I have no knowledge of a given situation. Thus, I use local cues, which imbed the optimal choices of those with local knowledge, increasing my chances of coming up with the optimal decision prior to having complete information.

When complete information does not exist, the optimal choice is to follow the local norms until they obtain more detailed information (or figure out why they are doing a given action). At that point, you can determine if it is warranted or unwise, and then you can make any optimal adjustments. Local knowledge is expected to be efficient when having dinner with a new group of people (or on a job interview), when traveling to a new country, or simply each time you enter an unknown situation. Note that this means your optimal decision will cause you to fail many psychology tests that someone is trying on you, but allow you to optimize your own behaviors. Although Bikhchandani et al. (1992) discuss a model of localized conformity, this study looks at the information set being revealed, not the conformity to local customs (or what they call cascades), per se. In that study, Bikhchandani et al. say that: "once a cascade has started, actions convey no information about private signals; thus, an individual's action does not improve later decisions" (pages 998-999). In this study, however, the information gained makes for better decisions.

II. The Psychology of Conformity

Conformity Bias is when an individual, instead of using their own judgment, tends to change their beliefs or behaviors to fit in with a group. This is so well known and so well accepted in the psychology literature that when seeking literature, I was referred to the principles textbook (rather than modern papers), and the modern studies simply analyze something that is deemed to be true. Kelman's (1958) work on the topic suggests that there are three types of conformity: 1. Compliance, which is the most superficial level of conformity (you are just complying with the group's norms). 2. Internalization, which is viewed as the deepest level of conformity. And 3. Identification, where individuals conform to the opinions and behaviors of a group because they perceive the group acceptance as valuable.

In more recent studies, Henrich and Boyd (1998) study "conformist transmission" in a model that looks at how cultures conform and how that conformity is handed down through generations (or through social connections). Their model concludes that "...the fact that humans can imitate implies that conformism also is likely to be an important component of human social learning." Chartrand and Bargh (1999) find evidence of a chameleon effect or the nonconscious mimicry of the behaviors of the people that one interacts with in their current social environment. Implying that these are inefficient behavioral responses (because they are nonconscious, rather than consciously planned and executed) – because this behavior automatically increases with the mere perception of another's behavior change.

More recently Van Baaren et al. (2004) discuss the fact that mimicry occurs unintentionally, and this act occurs even among strangers (as an automatic phenomenon). But they also argue that this mimicry has prosocial behaviors, leading to people being more helpful and generous towards all people (not only those that have been mimicked). Additionally, Leighton et al. (2010) find that automatic imitation generates affiliation, liking, and other positive social attitudes.

Most of this psychology literature declares the same phenomenon: people act strangely by following others instead of what they think is right or would have done without the other peoples' influence – asserting that this imitation is an irrational behavior. Most of this literature assumes it is irrational and tries to find ways to justify this behavior, with most explanations being linked to the social value of fitting in. But I disagree. This behavior is both rational and efficient in many contexts (although not all). Such as when the American Economic Association's own published advice for job market candidates is, when at dinner, to "...drink what others are drinking (probably wine) but in moderation", continuing to say "[a]t one recruitment dinner I attended, a bottle of wine came to the table, the candidate picked it up first and filled his wine glass to the brim and then looked on, visibly embarrassed, as everyone else at the table filled their wine glasses partway" (Cawley, 2018).¹ Thus admitting the efficiency of following local knowledge, which is discussed in detail in the next section.

III. An Economic Response of Local Knowledge (and when it works against us)

There is a simple model for this behavior:

Follow local customs when

Costs (of not following) – Benefits > 0

Which should be a logical solution. However, as noted above, entire strands of psychology literature, spanning over 60 years, fail to see this point. Here, the main *Benefit* is that some rare psychological experiment is being run on you, and you do not want to look bad. Or even in some of their experiments, when they ask for the correct answer, the benefit is being correct (whilst publicly pointing out that everyone else in the group is wrong – which still may not be worth the social ostracization).²

Meanwhile, the *Costs* can be considerable. Everyone driving in front of you slows down

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See <https://www.aeaweb.org/content/file?id=869>

² Most people do not thrive on showing people they are wrong in the way economists do.

(because they see the police officer and you do not), drives around a large pot-hole that will damage your car (that you cannot see because it is filled with water), being excluded by the group because you do not know the cultural norms (think of an overconfident American traveling abroad and not following the local cultural norms), drinking too much wine for the occasion at dinner, or simply not knowing if the elevator has two doors (of which the next stop will have everyone get off out the back door). Thus, in most cases, the simple solution is that the costs of not following the local knowledge exceed the benefits (unless you spend every day of your life worried that you are in a psychological experiment – which is, generally, a bad way to proceed through life).

Every day when you travel to a place that is new, or just generally unfamiliar, you have two choices.

1. Research everything you can about the place before you go (which is relatively time-consuming, and will likely still only provide some of the main matters about the location without full information, which is quite costly), or 2. Remain relatively rationally ignorant about the area (which is likely true, even if you put some effort into the first point). Thus, when you show up to a place you do not know well, whether it is a new restaurant with a new group of friends, a new town where you do not know the roads or where the police tend to do speed checks, or a new country or area with a different culture, first taking the time to observe the local knowledge for which you do not possess is an optimal strategy.

This allows you to efficiently avoid an obstacle that you do not know exists. Using local knowledge is a proxy for the efficient outcome in a situation where one does not have full information.

Following local knowledge can also lead to bad outcomes: Prison guards beating inmates, bullying, choices about your body (obesity/anorexia, excessive drinking, and smoking), and parenting decisions or abuse – simply because those locals (or other people around you) are doing it or supporting it. But also in positive ways: Saying hi to strangers, cleaning up after oneself, upholding strong moral values, making educational choices, or any other positive social pressures.

One day my son shows up at school and realizes everyone is wearing red. Although he does not have red on, he knows we have a red shirt in the trunk (which was left there the from the other day) and changes. According to the psychological literature, this would be an irrational switch if he chose to wear the red shirt without knowing why everyone else was in red. In this study, I argue that it is the optimal solution. Later that night, he confirmed that it was indeed the right choice to match his classmates, as his team received bonus points for wearing red (with no noticeable harm to him if there was no particular reason they were all wearing red).

When traveling to a new land (a foreign country or a new region of my own country), I often wait to see what others order and how they approach the customs of the meal. I also frequently change my order based on what others are ordering – which, again, would be argued to be irrational by other literature, but is the optimal choice. There are often local foods or ingredients that are known to be the best by the locals, thus allowing me to enjoy something that is done amazingly well in that area that I would have otherwise missed out on.

IV. Summary

When looking at the idea of conforming to others' actions, the psychology literature points out the general irrationality of this choice but tries to justify it as an argument of humans seeking acceptance. When the locals all slow down going around one particular curve in the road, or all order the same thing for dinner, is it possible that conforming to the local knowledge is efficient? When the cars slow down because they all know it is a dangerous curve or that is where speed traps are often set, which you do not know about, this would be the efficient use of local knowledge. Or when a restaurant has a particularly amazing dish on the menu that all locals know about, it is efficient to follow this local knowledge that you do not possess. Yet, the costs of following these actions are minimal at best.

When entering a situation with imperfect information, finding an efficient means to increase your knowledge base and finding the optimal

solution is critical. In this study, I argue that using cues from local actors, who presumably have more information about the situation than you, is efficient. Thus, following the locals and embedding their local knowledge into your decision is optimal and not an irrational act as has been described by the psychology literature for the last 60 years.

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