

The Same Face of the Two Smiths:

Adam Smith and Vernon Smith

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Going from personal to impersonal exchange seems to be a relevant feature that allows humans to develop complex societies and grow prosperous. Adam Smith's idea of moral imagination, embodied in the impartial spectator and achieved through sympathy, may integrate and complement today's evolutionary biology and experimental economic explanations, providing the missing key as to how we generate and internalize those rules of conduct that promote fair and cooperative behaviors.

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How do we go from personal to impersonal exchange? How do we go from cooperation among kin to cooperation among strangers?

Economic theory today explains the presence of cooperative behaviors and other-regarding behavior in terms of evolutionary biology and/or utilitarianism. Cooperation makes us evolutionarily fit, and it is in our interest to cooperate, at least in the long run. We create complex human society through this evolutionary process and through the internalization of the rules that allow us to trade successfully with strangers. These explanations are correct but fall short of explaining *how* we generate, internalize, and institutionalize those rules of cooperation that allow us to go from personal to impersonal exchange. The missing keys may be Adam Smith's ideas of moral imagination, sympathy, and innate desire to be both praised and praiseworthy.

The idea to use Adam Smith and some of the literature of his time to integrate the picture of human behavior emerging from experimental economics originates with Vernon Smith. In 1998 Vernon Smith courageously introduced *The Theory of Moral Sentiments* (TMS)—the “other” book of Adam Smith—into the experimental literature. Vernon Smith used TMS to help explain some experimental results with human and non-human primates and how those results relate to evolutionary biology. He was followed by many more economists, and now TMS is relatively commonly seen in the experimental literature. This article is an attempt to develop the argument that Vernon Smith originally proposed.

In particular, I suggest integrating Adam Smith’s ideas of sympathy and moral imagination with the current explanations deriving from experimental results to create a more complete picture of why and how humans cooperate, trust each other, and grow prosperous in industrialized societies. By this, by no means do I mean to diminish the importance of the traditional explanations based on self-interest. Self-interest is and remains a major driving force of human cooperation. Other-regarding preferences and/or a moral sense do not substitute for self-interest in any respect, but they may integrate and fill the gaps in explanations of human cooperation among strangers that are based exclusively on self-interest. Another couple of caveats are due. First, the description of Adam Smith’s views that I provide is instrumental to explain a problem that we face in today’s literature. Smith was not concerned about (nor aware of) evolutionary biology. His analysis is exclusively about human behavior. Nevertheless, as Vernon Smith has demonstrated, Adam Smith can be successfully used, even if out of context, to help us understand questions we face today. Secondly, I will use the word *sympathy* not as a synonym of altruism or benevolence but in its

Smithian meaning: as a *mechanism* through which we relate with others. The specific forms that this mechanism takes will be discussed below.

Cooperation and what are perceived as fair behaviors can be achieved in at least two non-mutually-exclusive ways—by monitoring and punishment of non-cooperative behaviors or by following internalized rules of conduct that promote fair and cooperative behaviors, or by a combination of both. From experimental results with both human and non-human primates and 18th century analysis, it seems that in small non-commercial communities it is easier to maintain cooperation with punishing deviant behaviors because of their low monitoring costs. But as societies become larger and their complexity increases, the costs of monitoring and punishing deviant behaviors become larger as well. Anonymous and atomized human commercial societies may be composed of a variety of smaller sub-societies, with relatively low monitoring costs. Nevertheless their size remains too large, and monitoring costs too high, to be able to rely on monitoring to generate the level of cooperation that we observe. Cooperation seems to rely also on following internalized rules of sharing and fairness. Societies where cooperation is achieved more through the internalization of rules of cooperation tend to have lower operational costs than societies where cooperation relies more on monitoring and punishment of noncooperative behaviors. This tends to be one of the factors that allows for a cheaper road to prosperity.

If the analysis provided here is sound, the results are relevant for at least three reasons. First, because it shows the importance of moral imagination and a sense of fairness in developing and sustaining complex commercial societies and the importance of commercial society for increasing not only prosperity but also cooperation. Second, because it highlights the need to

move beyond mere *homo economicus* in our economic analysis. And finally, like Vernon Smith's pioneering research, it reveals underappreciated depths of economic and social understanding in the 18th century.

This paper develops as follows. The first section describes some of the hypotheses used to explain cooperative behaviors in the existing literature. It is followed by the explanation of how Adam Smith may help us understand the mechanism through which we may be able to move from personal to impersonal exchange, namely the internalization of rules of cooperation achieved through sympathy, reducing the transaction costs present in complex anonymous societies. The Smithian explanation is subdivided in three sections: the generation and internalization of cooperation at the individual level, at the social level, the institutionalization of the rules of cooperation which may be seen as a feedback mechanism caused by and causing increasing cooperation. The final section of the paper briefly examines some limitations for developing cooperation.

Vernon Smith and economic experiments

Vernon Smith fathered the branch of economics that uses human (and non-human) subjects in experiments to understand economic behavior. Despite accusations of “mechanicism” (Lee and Mirowski 2007), Vernon Smith has increasingly demonstrated interest in a broad and full view of human beings, looking at the 18th century as a possible source of understanding and alternatives to the strict utilitarian mode (Smith 2008). Vernon Smith is brave in his calls for understanding Adam Smith's TMS, as many of today's explanations still

settle for the explanatory tool to which we are most accustomed: self-interest, and self-interest only.

In experimental results in industrialized countries, cooperation and fairness are routinely observed. Cooperation and fairness may vary with the degree of anonymity, because subjects do respond to incentives. Nevertheless, even with complete anonymity, a relevant amount of cooperation and fairness is observed. For example, using undergraduate subjects from the University of Arizona, even with double blind procedures, 29% of second movers choose \$25 for self and \$15 for other, over \$40 for self and \$0 for other, after the first movers have forgone \$10 for self and \$10 for other (Cox and Deck 2005). Additionally, cooperation and fairness are also observable in many foraging societies across the globe, although in different forms from the ones observed in industrialized countries. Fairness seems to be universally present among humans, even if it varies with different incentives and across cultures (Henrich et al. 2004). Interestingly, similar experiments done with non-human primates also show some level of cooperation and “fairness.” Non-human primates help each other in getting food and reciprocate the help received. They get upset if one gets an “unfair” share: if one primate undeservedly gets a larger portion or tastier food, the other primate screams in protest (de Waal 1996 and 2003 de Waal and Berger 2000, de Waal and Luttrell 1988, Brosnan and de Waal 2003, Jansen, Hare, Call and Tomasello 2006).

These experimental results show much more cooperation than economic theory predicts. So why do we cooperate so much? Vernon Smith (1998) presents a positive and negative reciprocity story using the behaviors of non-human primates to shed light on the origins of some human behaviors. Cooperation evolves, in part, when I punish you if you do not

cooperate and when I reciprocate if you do cooperate. Increasing evidence, though not conclusive, suggests that non-human primates cooperate and have some sense of reciprocity and fairness, suggesting human behaviors evolved over millennia into what today seems like an innate sense of cooperation and fairness (de Waal 2009, cf. Berry 2006 and Clutton-Brock 2009).

These observations and explanations can be complemented by evolutionary game theory models. Reciprocal behaviors, such as a tit-for-tat strategy, have been shown to be the most effective strategies over time (Axelrod [1984] 2006). So it is reasonable to believe that reciprocity is a product of evolutionary fitness, or in Gordon Tullock's words (Tullock 1985), if in games the players decide with whom to interact, and one player were found out to be disposed to cheat, all others would avoid interacting with that player: "Where ... there are many alternatives, you had better cooperate. If you choose the noncooperative solution, you may find you have no one to noncooperate with" (1081).

So, thanks to evolutionary fitness, it seems that we now reciprocate and cooperate. Non-human primates show some cooperation, as social beings. Humans, as social beings, may have shared some basic forms of cooperation. But humans cooperate much more than chimps and monkeys. Additionally, foraging societies show more cooperation the more their members are faced with commercial realities. And industrialized societies, which are imbedded in commerce, seem to show the highest level of cooperation.

Genes and culture may combine to help us arrive at today's (industrialized) high level of cooperation (Richerson and Boyd 2005). One aspect of culture that seems relevant, given the

cross-cultural studies present so far, is the exposure to markets. Controlling for other possible explanatory variables, Henrich et al. (2004) find that two variables account for a significant part (47 percent) of the variation between groups: “market integration” (that is, do people engage frequently in market exchange?) and “cooperation in production” (that is, what are the potential benefits to cooperative as opposed to solitary or family-based productive activities?). The higher the level of market integration, the higher the level of cooperation and sharing in the experimental games.

How can commercial societies, large anonymous societies of strangers, cooperate and sustain themselves rather than disintegrate? A social glue is needed, as monitoring costs for non-cooperators generally become prohibitive.

One hypothesis is that as societies expand, individuals internalize the rules of cooperation to which they are accustomed. This becomes part of a positive reinforcement mechanism of reciprocity and reputation. Kimbrough and Wilson (forthcoming) show that individuals in small groups learn to cooperate through daily social engagements. They then are more able to use their cooperation-skills in other environments. Rules of in-group cooperation are eventually somehow internalized so that cooperative behaviors are observed even in the absence of repeated or monitored interactions, but also in the presence of strangers.

Additionally, when exchange is non-coincident, it requires trust or at least monitoring the other’s behavior and being perceived to have the opportunity to punish defectors. The institutionalization of rules of fair conduct and the punishment of deviant behaviors may have facilitated this expansion of cooperation (Greif 2006, O’Hara 2008). Industrialized

countries' tendency to display more cooperation and prosperity than pre- and/or non-industrialized countries may be linked to this shift.

The explanations offered are powerful and appealing. Yet they leave some points unexplained. How do we get from screaming angrily at a group-member who does not divide the pie fairly to giving money to the homeless in the streets of a foreign city? How do we internalize and institutionalize rules of reciprocity so that they allow us to develop anonymous cooperation?

Adam Smith and cooperation

A possible explanation as to how we develop, internalize, and institutionalize rules of cooperation come from Adam Smith's *Theory of Moral Sentiments*, in particular from his idea of moral imagination.

Adam Smith seems at times to point toward a version of the utilitarian story presented today to explain why we are such cooperative beings (TMS, II.ii.3.2). And the fact that we observe more cooperation with more market integration can also be found in Adam Smith (LJ, 538). Nevertheless, "the modern procedure of attempting to derive cooperation from the self-interest assumption alone is [not] a faithful representation of the way [Adam] Smith actually thought about the problem" (Young 2001, p. 99. See also Evensky 2005). Indeed, although we observe Rational Choice utility-maximizing behavior in experiments with animal subjects,

we do not observe the more complex forms of cooperation more typical of human societies (Levy 1992).

Asking how a society of autonomous individuals coheres is not therefore a trivial question (Evensky 2001). Theories based only on self-interest are not strong enough to explain how we keep society from fraying. Vernon Smith (1998, 2003, 2008) recognizes this as well, as his continuous references to Adam Smith and the Scottish Enlightenment seem to indicate.

If one looks more carefully at TMS, one sees indeed that, in addition to the economic explanations familiar to us, Smith employs some additional explanations: imagination, sympathy, and the desire to be praiseworthy. These may allow Smith to offer a more complete explanation than the ones offered today.

Right after TMS II.ii.3.2, cited above, in TMS II.ii.3.4, Smith claims that human societies are characterized by the presence of justice. Indeed, a human society without justice would not be possible. “Justice ... is the main pillar that upholds the whole edifice. If it is removed, the great, the immense fabric of human society ... must in a moment crumble into atoms.” And how do we introduce justice in human society? “In order to enforce the observation of justice, therefore, Nature has implanted in the human breast that consciousness of ill-desert, those terrors of merited punishment which attend upon its violation, as the greatest safeguards of the association of mankind, to protect the weak, to curb the violent, and to chastise the guilty. Men, though naturally sympathetic, feel so little for another, with whom they have no particular connexion, in comparison to what they feel for themselves ... they have it so much in their power to hurt him, and may have so many temptations to do so,

that if this principle [“the consciousness of ill-desert” that “Nature has implanted in the human breast”], did not stand up within them in its defence, and overawe them into a respect for his innocence, they would, like wild beasts, be at all times ready to fly upon him; and a man would enter an assembly of men as he enters a den of lions” (p. 86).

Here is how Adam Smith offers us one of the missing keys to understand how we are able to internalize the rules of cooperation that allow us to go from personal to impersonal cooperation. Not only do we have our innate self-interest, we also have an innate sense of ill-desert. This sense of ill-desert is linked to our innate capacity to sympathize with others. Sympathy is our innate ability to share the feelings of someone else, our innate ability to have fellow-feelings.

The word sympathy is ambiguous, though. It contains at least three separate concepts. Sympathy can describe emotional contagion, empathy, as well as sympathy proper (de Waal 2009, but cf. Khalil 2009). Developments in neuroscience seem to indicate that we process the information of the movements of an other as if they were our own movements, blurring the distinction between us and the other (Rizzolatti and Sinigaglia 2008, Iacoboni 2008). The mirror neurons, responsible for these reactions called emotional contagion, are present in both human and non-human animals and seems to be the most ancient form of sympathy (de Wall 2009).

A more sophisticated form of emotional contagion, which seems to have emerged at later stages of evolution, is empathy. Empathy allows me to feel your sorrow and to share your joy. Empathy allows me to process your emotions in my brain as if your emotions were my

emotions and also to react to it as if your emotions were my emotions, not just to process in my brain your physical movements as I would process mine. This instinctual channel with which we communicate with others, again, seems to be present in human as well as in non-human animals (de Waal 2009). While the activities of the mirror neurons in the case of emotional contagion are observable only by “looking inside” someone’s brain, empathy can be observed with the naked eye. Empathy seems to be involved when an animal squeaks upon seeing another animal receiving an electrical shock, when you gasp upon seeing that I am about to fall, when you smile upon seeing a smiling face.

The Smithian sympathy (and what in the 18th century was called “emotional contagion”; see Forget 2003) seems to describe behaviors that today we would associate with mirror neurons and call empathy (Rizzolatti and Sinigaglia 2008, Iacoboni 2008). For Smith, indeed, sympathy is what causes us to “naturally shrink and draw back our own leg or own arm” “when we see a stroke aimed and just ready to fall upon the leg or arm of another person”; it is what causes us to “feel an itching or uneasy sensation in the correspondent parts of the body” when we have to look at “the sores and ulcers which are exposed by beggars in the streets” (TMS I.i.1.3, p. 10). Additionally, “Upon some occasions sympathy may seem to arise merely from the view of a certain emotion in another person. The passions, upon some occasions, may seem to be transfused from one man to another, instantaneously, and antecedent to any knowledge of what excited them in the person principally concerned. Grief and joy, for example, strongly expressed in the look and gestures of any one, at once affect the spectator with some degree of painful or agreeable emotion. A smiling face is, to everybody that sees it, a cheerful object: as a sorrowful countenance, on the other hand, is a melancholy one” (TMS I.i.1.6, p. 11).

So far, we have a mechanism that gives us a route toward cooperation. Copying and sharing the behaviors and passions of others seems to be an instinctual form of bonding among the social species. Human and non-human primates bond with their kin and in-group through emotional contagion and empathy. Had Smith stopped here, the differences in complexity between the societies of human and non-human primates would remain unexplained. The level of cooperation that we share with other social species does not seem to provide a clear basis for the development of the complex rules of cooperation that we observe in our complex societies.

But, Smith goes on, and adds imagination to empathy to explain what is properly called sympathy. This seems to be what allows us to form and internalize rules of fairness that in turn allow us to cooperate with strangers as well as with in-group members.

Imagination, if understood as the ability to understand the future, is observable also in non-human primates. Strategic imagination seems to explain many behaviors in chimps (de Waal [1982] 2007). But when something like empathy is combined with imagination, through understanding (conscious or not), a different kind of imagination seems to arise, a moral imagination, something that is more typical of humans.

Sympathy proper, indeed, is for Smith innate in humans and is more than simply empathy. For Smith, indeed, sympathy is possible “by changing places in fancy with the sufferer” (TMS I.i.1.2-3, p. 9-10). It is through our imagination that we are able to transport ourselves into the shoes of other people and somehow understand and feel as they feel, even if

imprecisely (See Griswold 2006). But this implies that we understand the situation that generated the passions in the other. “[O]ur sympathy with the grief or joy of another, before we are informed of the cause of either, is always extremely imperfect ... Sympathy, therefore, does not arise so much from the view of the passion, as from that of the situation which excites it” (TMS I.i.i.9-10, 11-12). It is our ability to merge imagination, empathy, and reason, to merge emotions with understanding, even if not necessarily deliberate or conscious, that lets proper sympathy arise. It is “only [these] most advanced forms of knowing what others know [that] may be limited to our own species” (de Waal 2009, 100).

Let’s go back to the monkey who gets an “unfair” share of food. A capuchin monkey that receives some cucumber rather than grapes, while its neighbor “unfairly” gets the grapes, will scream and yell and reject the cucumber. Humans also get upset if someone does something wrong to us, just like monkeys do. This is not a calculated reaction. It is a gut reaction, an emotional response, similar to the behaviors observed in non-human primates. Smith calls this reaction resentment, that innate sense of ill-desert that is the base of justice. De Waal calls this reaction in non-human primates “fairness,” which is also linked to cooperation among primates. But there is a major difference between human resentment a-la-Smith and non-human primate “fairness.” What is relevant for the argument presented here is not the screaming monkey, but what is *not* observed in the *other* monkey, the one with the grapes. The monkey with the grapes will keep eating his grapes and not only ignore the angry other but often reach out, grab, and eat the rejected cucumber as well. There is no active sharing (Brosnan and Waal, 2003. See also Jensen, Hare, Call and Tomasello 2006, Brosnan and de Waal 2003, de Waal and Brosnan, 2006, and Mitani and Watts, 2006). A human, according to Smith, would generally not behave like de Waal’s monkey with the grapes. Smith claims

humans are able to do two things: humans would not “keep eating their grapes” when faced with “unfairness,” and humans would get upset even if something wrong is done to others, not only if it is done to themselves.

A human would generally be able to imagine himself in the place of the other, feel the resentment, and correct the blameworthy behavior. A human would share the “grapes.”

Additionally, humans would often be willing to incur a cost to themselves to prevent or fix an injustice done to others even they would get nothing out of it (Levy and Peart 2004).

Why? Because we have this innate propensity to imagine ourselves in the shoes of another—to suffer with the sufferers, and to rejoice in someone’s joy, even if we get nothing out of it but the pleasure of mutual feelings; because human have an innate desire to be praiseworthy (TMS III.3.4-5, 136-138). This is what allows us to go from personal to impersonal exchange by internalizing rules of fair behavior.

But before looking at the details of the mechanism through which the internalization of rules of fair conduct takes place, it is important to notice one more thing: that sympathy cannot be reduced to self-interest. Smith’s words are worth citing in full.

“But whatever may be the cause of sympathy, or however it may be excited, nothing pleases us more than to observe in other men a fellow-feeling with all the emotions of our own breast; nor are we ever so much shocked as by the appearance of the contrary. Those who are for deducing all our sentiments from certain refinements of self-love, think themselves at no loss to account, according to their own principles, both for this pleasure and this pain.

Man, say they, conscious of his own weakness, and of the need which he has for the

assistance of others, rejoices whenever he observes that they adopt his own passions, because he is then assured of that assistance; and grieves whenever he observes the contrary, because he is then assured of their opposition. But both the pleasure and the pain are always felt so instantaneously, and often upon such frivolous occasions, that it seems evident that *neither of them can be derived from any such self-interested consideration*. A man is mortified when, after having endeavoured to divert the company, he looks around and sees that nobody laughs at his jests but himself. On the contrary, the mirth of the company is highly agreeable to him, and he regards this correspondence of their sentiments with his own as the greatest applause” (TMS I.i.2.1, p. 13-14. Emphasis added).

This innate ability to put ourselves in the shoes of others, sympathy proper, offers a route toward explaining *how* we internalized and *how* we institutionalize cooperative behaviors, and therefore *how* it is possible to go from personal to impersonal cooperation. Smith’s explanation involves two levels. He explains how the internalization of cooperative behavior takes place at the individual level as well as at the social level. His explanations rely on moral imagination, sympathy, and the desire to be praiseworthy.

Generation and Internalization of Cooperative Behaviors at the Individual Level

When someone does wrong to me, I resent the wrongdoer. Similarly, when I see someone doing wrong to someone else, and I see how this person gets upset at and resents the wrongdoer, I imagine myself in his place and share the resentment. I then realize that if I did the same wrong, others would resent me as well. But I do not want to be the object of such resentment and blame. I therefore will try to avoid that behavior. Similarly, if someone is

kind to me, I experience gratitude. And if I see an act of kindness and the gratitude experienced by the receiver toward the giver, with my imagination, I share the gratitude and praise the giver. I then realize that I also want to be the object of such praise. I will therefore imitate that behavior. So, thanks to our moral imagination, “we suppose ourselves the spectators of our own behaviour, and endeavour to imagine what effect it would, in this light, produce upon us. This is the only looking-glass by which we can, in some measure, with the eyes of other people, scrutinize the propriety of our own conduct” (TMS III.i.5, p. 112).

At the individual level, with our moral imagination we are able to divide ourselves in two: an I-agent and an I-spectator. The I-spectator gives praise to the I-agent, just as we give praise to someone when we see a praiseworthy behavior. The I-spectator also gives blame to the I-agent, just as we give blame to someone when we see a blameworthy behavior. Because we want to be the object of praise (and not simply to be praised) and not be the object of blame from others (rather than simply avoiding being blamed), we behave in a way that another would judge praiseworthy and not blameworthy. And we do so by imagining how the other may see us, by placing ourselves in the shoes of the other and feeling what he would feel. The presence of others allows us to develop this ability to imagine ourselves as someone else would see us. With enough practice, we will be able to see ourselves with the eyes of an impartial spectator, of an impartial other, even if the other is not physically there. We will behave in a praiseworthy way, even if no one is watching us. At that point, I will not cheat you, not because I fear your retaliation or because you will think I am blameworthy, but because I myself will be able to see my behavior as blameworthy. So you do not need to be

there for me to be honest. I will be honest anyway, because I now know that one who is honest is the object of praise and one who is dishonest is the object of blame.

What I think is appealing about Smith's explanation is that the most effective way to develop our impartial spectator is through the presence of others, and of strangers in particular. We start our moral development process with our kin and in-group, but the heavy-lifting for the development of impartiality is done thanks to the presence of strangers. We desire to be the object of praise in the eyes of a kin member as well as in the eyes of a stranger. And if we develop an impartial spectator within us, thanks to our interactions with others and with strangers in particular, then we are able to reduce the external cost of monitoring non-cooperative behavior, which would be so tempting in particular with one-time interactions. The full development of the impartial spectator is something that very few individuals are able to achieve over the course of their lifetimes. Nevertheless, the presence of this ever-watchful internal eye may be significant enough to promote and maintain a certain level of cooperation among strangers. Thus, Smith offers us an explanation for human cooperation that works with kin as well as with non-kin.

Generation and Internalization of Rules of Cooperation at the Social Level

How we generate and internalize social rules of cooperative behaviors is explained through the same mechanism. Through our common propensity to share others' feelings and "the love and admiration which we naturally conceive for those whose character and conduct we approve of" (TMS III.2.2., p. 114), we learn from each other what generates praise or blame, what is praiseworthy or blameworthy, we want to imitate or avoid that behavior, and so we

embody that learning into rules of just conduct that will guide our present and future behavior, those rules so much needed to cooperate with strangers as well as with our in-group.

Let us say that someone does something wrong. “We hear everybody about us express the like detestations against [these wrong actions]. This still further confirms, and even exasperates our natural sense of deformity. It satisfies us that we view them in the proper light, when we see other people view them in the same light. We resolve never to be guilty of the like, nor even, upon any account, to render ourselves in this manner the objects of universal disapprobation. *We thus naturally lay down to ourselves a general rule*, that all such actions are to be avoided, as tending to render us odious, contemptible, or punishable, the objects of all those sentiments for which we have the greatest dread and aversion. Other actions, on the contrary, call forth our approbation, and we hear every body around us express the same favourable opinion concerning them. Everybody is eager to honour and reward them. They excite all those sentiments for which we have by nature the strongest desire; the love, the gratitude, the admiration of mankind. We become ambitious of performing the like; *and thus naturally lay down to ourselves a rule of another kind*, that every opportunity of acting in this manner is carefully to be sought after” (TMS III.4.7, p. 159. Emphasis added). Thanks to our innate sympathy and desire to be praiseworthy, by collecting the experience of many and transmitting that knowledge to many others, we form social rules of moral conduct, internalizing cooperative behaviors.

So we may have a possible explanation for *how* we generate and internalize rules of cooperation. Rules of cooperation are formed and internalized, according to Smith, thanks

to our imagination, our sympathy, our desire to be praiseworthy and to receive the approbation of others.

Note the difference between Smith and modern explanations that may incorporate esteem or praise. The internalization process that is commonly described today goes from praise to praiseworthiness. I want to be praised and eventually I will become praiseworthy. Smith explicitly rejects this argument to propose its opposite instead. Smith claims that what is natural is our desire to be praiseworthy and what is derived from it is our desire to be praised. “The love of praise-worthiness is by no means derived altogether from the love of praise. Those two principles, though they resemble one another, though they are connected, and often blended with one another, are yet, in many respects, distinct and independent of one another. The love and admiration which we naturally conceive for those whose character and conduct we approve of, necessarily dispose us to desire to become ourselves the objects of the like agreeable sentiments, and to be as amiable and as admirable as those whom we love and admire the most ... Neither can we be satisfied with being merely admired for what other people are admired. We must at least believe ourselves to be admirable for what they are admirable. But, in order to attain this satisfaction, we must become the impartial spectators of our own character and conduct ... Their approbation necessarily confirms our own self-approbation. Their praise necessarily strengthens our own sense of praise-worthiness. In this case, so far is the love of praise-worthiness from being derived altogether from that of praise; that the love of praise seems, at least in a great measure, to be derived from that of praise-worthiness” (TMS III.2.2, p. 114).

So Smith may provide us with a possible mechanism through which we generate and internalize rules of cooperation. He also may provide us a feedback mechanism through which our natural cooperation is enhanced: commerce and the institutionalization of the rules of cooperation that seem to come with it.

The Institutionalization of Rules of Cooperation and Their Role as Feedback Mechanisms.

Human interactions seem to shape the environment in which one lives and the environment in which one lives may provide a feedback mechanism that shapes humans' behaviors.

Different environments, indeed, may affect us differently. In particular, commerce and commercial societies seem to effectively institutionalize rules of cooperation and to provide an environment which favors cooperation farther. "Such internalization [of fairness norms in more market-oriented societies] would require that fairness is learned in the course of the market exchange, and we have evidence that this is the case across the development of life cycle. Camerer and Thaler (1995) agree that norms of fairness are learned, noting that kindergarteners are most selfish in economic experiments, while by the sixth grade, more fair behavior towards one's peers emerges" (Ensminger 2004 p. 358).

Also Adam Smith tells us that fairness, rules of cooperation and sharing may feed and feed off different institutional environments. Cooperation and development of moral sense evolve with both our internal judgment and with external institutions. The opportunity to trade with strangers allows individuals to learn more easily how to interact with others in a fairer way, without being exclusively motivated by fear of retaliation. The opportunity to trade with strangers also allows for the generation of institutions that facilitate cooperation,

which in their turn facilitate the internalization of cooperation. Commerce seems therefore to reduce the cost of cooperation and to increase how relevant cooperation is in our life.

Not only the wealth generated by commerce let us abandon the practice of abandoning unwanted children to be devoured by wild beasts (WN, introduction), and allows honesty to increase with the decrease of dependency and the increase of interdependency (LJ(B), 205; WN III.iv.4. See Young 2003). But commerce also brings “order and good government, and with them, the liberty and security of individuals ... This, though it has been the least observed, is by far the most important of all their effects” (WN III.iv.4, p. 412). Commerce, therefore generates the “regular administration of justice,” which is a way in which rules of cooperation are institutionalized, and the foundation of commercial prosperity (Rosenberg 1990, and Rasmussen 2006).

Adam Smith tells us also that someone else before him noticed that commerce increases cooperation, these effects that today we at times call “market integration”: David Hume. David Hume ([1777] 1987), in particular in his essays “Of Refinement in the Arts,” claims that commerce brings about an increase in sociability and humanity. Commercial societies are generally richer than non-commercial societies. More people have more wealth. And the more wealth we have, the more we cluster together to show off our wealth to others. The increased interaction with strangers, the increased opportunities for men to interact with women, makes people more sociable and more humane, and more cooperative. Commerce “softens” the human spirit. “So that, beside the improvements which they [mankind] receive from knowledge and the liberal arts, it is impossible but they must feel an encrease of humanity, from the very habit of conversing together, and contributing to each other’s

pleasure and entertainment. Thus *industry, knowledge, and humanity*, are linked together by an indissoluble chain, and are found, from experience as well as reason, to be peculiar to the more polished, and, what are commonly denominated, the more luxurious ages” (Hume [1777] 1987, 271. Emphasis in original).

Adam Smith and his 18th century contemporaries would not be surprised by today’s cross-cultural results suggesting that differences in cooperation and fairness occur in part due to degree of market integration (Henrich et al. 2004), and in those writers we may find an explanation. The increase in prosperity brought about by the internalization and the institutionalization of the rules of cooperation and at the same time made possible because of these rules of cooperation allows us to further develop cooperation. The increasing presence of commerce seems to become both the internalized and the institutionalized social glue needed to keep together large assemblies of strangers (Paganelli 2008).

Additional parallels

Adam Smith as well as David Hume, Adam Ferguson ([1767] 2007), and many other 18th century writers count the internalization and the institutionalization of the rules of cooperation as some of the benefits that come with commerce (Clark 2007). Yet, they also see the potential fragility of these benefits. Similarly, in today’s experimental results we can observe how cooperation may easily disappear.

Increases in commerce bring about increases in wealth, sometimes with large opportunities for gain. Our 18th century writers recognized at least two potential problems with this: larger

opportunities for opportunistic behaviors, which would eventually undermine the moral base of commerce and the individual trust that commerce tends to develop, and rent-seeking, which would undermine the institutional trust that commerce tends to encourage.

Rent-seeking indeed implies both that the few benefit at the expense of many because of the former's ability to gain some government's favors, and that the rent-seeker will likely rely more and more on government and its power and authority to allocate resources and resolve disputes, substituting the rules of cooperation generated by commerce (Paganelli 2009).

Experimental results seem to indicate that once trust is broken, it is difficult to recreate it (for example, Rigdon, McCabe, Smith 2007). They also seem to indicate that the rules of fairness internalized in anonymous societies may be crowded out by the ever-present monitoring eye of the government. Elinor Ostrom (2005) presents evidence of this crowding out from results of Public Goods games: "Voluntary behavior is the result of what we have called the predisposition to contribute to a cooperative endeavor, contingent upon the cooperation of others. The monetary incentive to contribute destroys the cooperative nature of the task, and the threat of fining defectors may be perceived as being an unkind or hostile action (especially if the fine is imposed by agents who have an antagonistic relationship with group members). The crowding out of voluntary cooperation and altruistic punishment occurs because the preconditions for the operation of strong reciprocity are removed when explicit material incentives are applied to the task" (p. 20). Material incentives crowd out moral incentives, since moral incentives are treated as irrelevant (Handy 2008).

It would be instructive to have more experimental evidence, not only on how we may have gone from personal to impersonal exchange, based on the insights of Adam Smith and his contemporaries, but also on how fragile or robust impersonal exchange is, how susceptible to the destruction of trust caused by unconstrained self-interest or by the over-monitoring of an external power.

Conclusion

Looking at Adam Smith, at all of his works, as Vernon Smith taught us a decade ago, may be a fruitful avenue for improving our understanding of experimental results and economic theory regarding the generation, the sustainment, and development of cooperation. Moral imagination, sympathy, and the desire to be praiseworthy, as Adam Smith suggested, may help explain how human cooperation develops from personal to impersonal exchange.

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