Chapter 3 Communities

People throughout history have been known to devise ingenious ways to cooperate. One way is to make the benefits and burdens in one engagement depend not only on what takes place there, but also on what happens in some other engagement. In Desta's village the same set of households share the local commons, offer one another loans, join the *iddir*, and help one another out in times of need. The interesting point isn't that the same group of people are in a number of long-term relationships (who else is there to form long-term relationships with?), but that the relationships are tied to one another.

Tied engagements

To see how ties can help, suppose that in the patron—client relationship we studied in the previous chapter, the discount rate A (the patron) uses to value the future benefits of cooperation with B (the client) exceeds 25% (or $\frac{1}{4}$) per year. We know that for want of trust, the pair would be unable to form a partnership. But now imagine that, in addition to the annual flow of \$4,000 worth of working capital A has access to, he has access to an annual flow of a different type of working capital, worth \$3,000 to him. B doesn't have the skills to work with that capital, but someone named C does. The time C would need to work A's capital into a marketable product is worth \$1,000 to her. Like B, person C doesn't have access to the market for products. The product can fetch \$6,000 in the market and A is in a position to procure it. A considers approaching C with a proposal to form a partnership: the \$6,000 would be used first to compensate the pair; the surplus would then be divided equally between them. Each would enjoy a profit of \$1,000 annually. For what values of r is a partnership between them viable?

As C's motivations in the potential relationship are similar to B's in the previous example, we needn't study them again. But we do need to work through A's reasoning, because the numbers matter. So let us start in year 0. Suppose C has adopted grim. If A advances his capital to her but reneges on the agreement once she has produced the output, he gains \$3,000 (\$6,000 minus \$3,000) that year. Set against it is the \$1,000 he would lose every year, starting in year 1. That loss, calculated in year 0, is \$1,000/r. If 1,000/r is less than 3,000, A will renege. If, on the other hand, 1,000/r exceeds 3,000, A can do no better than to adopt grim himself. Since 1,000/r exceeds 3,000 if and only if r is less than $\frac{1}{3}$ (approximately 33%), the pair are able to form a long-term relationship if A's discount rate is less than $\frac{1}{3}$ per year. So suppose r is less than $\frac{1}{3}$. Then A is able to form a relationship with C, but not with B (r exceeds $\frac{1}{4}$), remember; and $\frac{1}{3}$ exceeds $\frac{1}{4}$).

We are now able to show that *A* could form a relationship with *B* if the three were to tie the

pair of undertakings. Let the proposal be to create both partnerships, but with the understanding that if any party in any year was to act opportunistically, *both* relationships would be terminated. In order to formalize this, let the rule of behaviour adopted by *B* (respectively, *C*) now read: begin by cooperating with *A* and *C* (respectively, *B*) and continue to cooperate so long as *no one* has broken their agreement, but cease cooperating with everyone following the first defection by any one in either relationship. Similarly, let the rule of behaviour adopted by *A* now read: begin by cooperating with *B* and *C* and continue to cooperate so long as *no one* has broken their agreement, but cease cooperating with everyone following the first defection by any one in either relationship. Each of the parties has adopted grim once again, but grim here comes with an added sting.

It's easy enough to confirm that *B* would adopt grim if *A* and *C* adopt grim and that *C* would adopt grim if *A* and *B* adopt grim. The interesting exercise is to determine *A*'s incentives to cooperate if *B* and *C* adopt grim. As both clients would terminate their relationship with him if he behaved opportunistically with either, *A* would defect from both relationships if he defects at all. What remains is to calculate *A*'s gains and losses if he defects from both relationships in year 0. If he does, he gains \$7,000 now (\$4,000 from his partnership with B; \$3,000 from his partnership with *C*). Set against that is the value of all the future benefits from cooperation he will have to forgo. That loss is (1,000 + 1,000)/r. It follows that *A* can't do better than to adopt grim himself if \$7,000 is less than 2,000/r; which is to say, if r is less than $\frac{4}{7}$. Since $\frac{4}{7}$ exceeds $\frac{1}{4}$ (it lies between $\frac{1}{4}$ and $\frac{1}{3}$), the condition under which A and B are able to cooperate is weaker. Suppose r is less than $\frac{4}{7}$ (per year), but greater than $\frac{1}{4}$ (per year). By tying the relationships, both can be created; whereas, if they are kept separate, only the one between *A* and *C* can form. The intuition behind the finding is clear. *A* faces greater temptation to defect from his agreement with *B* than the one with *C*, which is why the circumstances under which a relationship could form with B are more restricted than they are with $C(\frac{1}{4})$ is less than $\frac{1}{3}$). By tying the two relationships, *A*'s temptation to break his relationship with *B* is reduced (%) exceeds 1/4).

While *C* doesn't lose from the move to tie the partnerships, she doesn't gain either. Only *A* and *B* gain. So *B* has every reason to offer solidarity to *C*, whom she now regards as a professional comrade. *B* may even offer a small compensation to *C*, so as to give her a positive incentive to agree to having the two partnerships tied. In return, *C* promises to stick by *B* should *A* mistreat her. He doesn't do that, of course, but only because he is smart enough to know that *C* would break up their relationship if he did.

Further refinements are needed when people who wish to trade with one another are separated by distance. Community responsibility systems in Italy during the 12th and 13th centuries helped people to obtain credit and insurance. Transgressions by a party were met in a collective way: the group to which the injured party belonged imposed sanctions on the group of which the transgressor was a member. In such arrangements it is communities, not individuals, that acquire a reputation for honesty. Tying relationships in this manner creates incentives for members of a peer group to keep an eye on one another. The institution reduces

the costs people incur in keeping an eye on one another.

The drawback of tied relationships among people having different interests is that they require further coordination. If, in our numerical example, *B* possessed not only her own skills but those of *C* as well, and if she had the time to work for *A* in both ventures, it would be simpler for *A* to offer both partnerships to *B*, with the proposal that *they* be tied. The relationship would involve only *A* and *B*, requiring less coordination.

Networks

The distinction between personal and impersonal transactions is not sharp. Even in a sophisticated market (modern banking), reputation plays a part (credit rating of the borrower). But the distinction is real. Meeting new people in Becky's world is often accidental, but people spend resources in order to make new acquaintances. Why? One reason is that new acquaintances may be in a position to provide *information*.

One can think of interpersonal networks as systems of communication channels linking people to one another. Networks include as tightly-woven a unit as a nuclear family or kinship group, and one as extensive as a voluntary organization, such as Amnesty International. We are born into certain networks and enter new ones. Personal relationships, whether or not they are long-term, are emergent features within networks.

The clause 'personal relationships' in the notion of networks is central. It involves trust without recourse to an external enforcer of agreements. Scholars have argued that civic engagements in Becky's world and communal activities in Desta's world heighten the disposition to cooperate. The idea is that trust begets trust and that this gives rise to a positive feedback between civic and communal activities and a disposition to be so engaged. That positive feedback is, however, tempered by the cost of additional engagements (time), which, typically, rises with increasing engagements. The economist Albert Hirschman has observed that trust is a *moral good*, in that it grows with use but decays with disuse; which means that we don't need to 'economize' on trust, in the way we need to with 'bread and butter goods' like bread and butter. Trust shares this feature with skills: the more one practises a skill, the better one gets at it.

Weak ties

Relationships can be strong or weak. One can be misled by this into thinking that weak ties are not valuable. In fact they can be very valuable. While working at his previous job, Becky's father learnt through word of mouth that the firm he now works for was looking to hire someone with his qualifications. There is much empirical evidence that weak ties are useful because they connect people to a wide variety of other people, and so, to a large information base. Engagements among people with weak ties in Becky's world are untied. Becky's father has little to do with the Parent-Teacher Association (PTA), of which her mother is an active member. Similarly, Becky's mother has nothing to do with the association of lawyers to which

Becky's father belongs. Moreover, neither the PTA nor the Bar Association play any role in their social life.

Strong ties

In Desta's world ties are mostly strong because they involve tied engagements in long-term relationships. As this sort of arrangement sets limits on the range of people with whom people are able to do business, it offers few opportunities for material advancement. In Chapter 6 we will confirm that strong ties among kinship hinder economic progress in the contemporary world, by limiting the amount of insurance coverage households are able to obtain, by maintaining a low rate of return on investment, and by stimulating fertility. But if used wisely, strong ties can be of help in seeking economic opportunities in the outside world. Consider migration. One enterprising member of the rural community moves to the city, supported by those with whom he has strong ties at home while he searches for work. He is followed by others in a chain-like fashion, as information is sent home of job prospects. Migrant workers even recommend village relations to their bosses. Bosses in turn favour their employees' kin, because doing so reduces the risks involved in hiring people they don't know. This would explain why city mills in poor countries have been found to employ disproportionate numbers of workers from the same village. Markets and communities are capable of functioning in such ways as to offer mutual benefits.

Why do networks in Desta's world operate along ethnic or kinship lines and why are they multi-purpose and dense, unlike the specialized professional networks such as those of academic economists and psychotherapists in Becky's world? Our previous analysis offers an answer. As membership is defined by birth, entry into ethnic or kinship networks is impossible, nor is exit possible. Moreover, membership is easily verifiable. Proximity within the village enables individuals to know one another's characteristics and dispositions well. Consequently people there don't suffer much from a problem known in the insurance industry as adverse selection. In the insurance context, firms are said to face a problem of 'adverse selection' when people who are bad risks are indistinguishable from people who are good risks and are able to displace the latter. Proximity within the village also enables people to observe one another and see what they are about. Consequently people there don't suffer much from a problem known in the insurance industry as *moral hazard*. In the insurance context, firms are said to face a problem of 'moral hazard' when insurees don't take those precautions against bad outcomes that may have been agreed upon. Tied long-term relationships make the networks multi-purpose and dense. In contrast, people enter and exit professional networks out of choice, with the result that the networks have sharp, limited goals. Membership doesn't impose constraints on what people can do with other aspects of their lives, such as where to shop, what to eat, which school to send their children.

We shouldn't be surprised that the networks people bequeath their children in Desta's world frequently amount to ethnic or kinship networks, for who else is there in rural societies with whom one can form links? However, even though it is true that exit from one's ethnicity or kinship is literally impossible, children do have a choice of not *using* the networks they have inherited. Why then do people maintain so many inherited networks even in Becky's world?

The reason they do is that one can't costlessly re-direct relationships once they have been established. Such investments are specific to the relationships. Moreover, as trust begets trust, the cost of maintaining a relationship declines with repeated use (witness that we often take our closest friends and relatives for granted). The benefits from creating new relationships are low if one has inherited a rich network of relationships, which is another way of saying that the cost of not using inherited networks is high. Outside opportunities have to be especially good before it is in someone's interest to cease making use of inherited links. This explains why we maintain so many of the relationships we have inherited from our family and kinship, and why norms of conduct pass down the generations. We are, so to speak, locked in from birth.



7. Teff threshing in Ethiopia