RESEARCH ARTICLE

The dynamic efficiency of gifting

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Abstract

In his *Scroogenomics*, Joel Waldfogel argues that gifting creates enormous deadweight loss, as individuals give one another gifts that they do not want or cannot use. He views efficiency as static, calculating the gains from trade (or gifting) at the moment of transaction. A puzzle arises, however, when one realizes that gifting has been a nearly ubiquitous institution throughout history. If gifting wastes valuable resources, why does it persist? We argue that gift giving is dynamically efficient despite the possibility of generating short-term deadweight loss. A well-functioning market economy requires expanded social networks and trustworthiness among anonymous and quasi-anonymous exchange partners. Gifting allows individuals to signal trustworthiness by offering 'burnt sacrifices'. Gifting practices that include a willingness to sacrifice via reciprocity norms, public visibility and ritual will tend to promote generalized trust. We consider these four elements – sacrifice, reciprocity, publicness, and ritual – to be critical institutional design principles for fostering dynamic efficiency. Our essay contributes to the literature on institutional economics by prompting scholars to think about the long-term (dynamic) efficiencies generated by cultural practices that appear inexplicably inefficient.

Key words: Dynamic efficiency; gifting; reciprocity; trust

1. Introduction

Economics is rarely in want of earning its reputation as the dismal science. Only an economist would ask, 'Why do people give gifts for holidays when cash is much more fungible and efficient?' The question is understandable within a narrow economic framework based on comparative statics. From a thinly rational perspective, gifting runs the risk of mismatched preferences that might generate huge deadweight loss. This is the argument of Joel Waldfogel's popular book *Scroogenomics: Why You Shouldn't Buy Gifts for the Holidays.*¹ Let's face it, many ugly sweaters and ceramic statuettes given by relatives and friends end up in the closet for years only to be ultimately thrown out. Estimates of this annual deadweight loss run into the billions of dollars just for Christmas alone (Waldfogel, 1993: 1336). These suboptimal gifts waste valuable storage space, divert resources from more desired products and activities, never realize their full use, and prompt industries to make more junk that we simply don't need or want. This, in turn, fuels criticism of capitalism as a system built upon needless 'consumerism' (Horsley and Tracy, 2001). When adding to this the high opportunity costs incurred in shopping for unappreciated presents,² gifting for holidays and celebrations becomes an economist's worst nightmare.³

¹This 2009 book is a highly readable and delightful expansion on Waldfogel's (1993) article in the *American Economic Review*. We sincerely applaud Prof. Waldfogel for the popularization of his economic ideas.

²Admittedly, some people enjoy the act of shopping just as gamblers may enjoy the act of gambling irrespective of winnings. ³Waldfogel only considers the actual gift received; he does not account for the potential waste generated by the decorative paper and time spent wrapping.

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But does the process of gift-giving produce more social benefits than the static deadweight loss it might generate? Is receiving an ugly sweater now stored in the back of the closet more valuable than an economist might realize? We contend gifting has positive and long-term economic and social value.⁴ We acknowledge the inefficiency of gifting in a static sense. Static inefficiency can be found everywhere. Socioeconomic institutions like gifting are, however, often designed and/or evolve to overcome short-term disequilibrium and promote long-term growth and stability (North, 1990). We question the implications of static equilibrium theorizing because it ignores the way imperfect markets readjust to pervasive error rather than realizing some global equilibrium (Boettke, 1997). In this light, we argue that ritualistic gift-giving enhances long-term socioeconomic efficiency by reducing uncertainty, enhancing social trust, and building (and maintaining) relational social networks that are crucial for the smooth functioning of market economies.

Our argument takes inspiration from Marcel Mauss's *The Gift*, an anthropological study written in the early 20th century. Mauss observed that gifting is ubiquitous across time and space. Many gifts involve 'burnt offerings' – presentations that have little practical use or intentionally destroy valuable resources. Being an anthropologist, Mauss didn't have the theoretical tools of institutional economics to see that the benefits from such burnt offerings enhance the atmosphere of social exchange, promoting trade, and mitigating physical conflict. Using bounded-rationality theory, we emphasize how gifting institutions economize on the cost of gathering information. In thin markets, in which exchange partners are quasi-anonymous and trade with them is intermittent, reciprocal trust can be lacking. Burnt-offering (i.e. gifting) rituals provide valuable heuristics about the reliability of potential trading partners. Widespread public participation in such rituals makes the sacrifice visible not only to the parties to the gift exchange, but also to third parties that form judgments about the general level of trust in society. In a world rife with uncertainty, participating in iterated and publicly visible gifting rituals becomes an institutional mechanism for supplying information about widespread trustworthiness, thereby reducing transaction costs. Persons who give generously consequentially attract trade partners and flourish, benefiting society writ large.

The contemporary economic literature emphasizes one-shot analyses of gift giving and overlooks the broad institutional structure of repeated gift exchanges that create reciprocal trust. Contemporary analyses of gifting are therefore static, focusing on the gift and not the gifting process (or custom writ large). Holding all other variables constant, and at the margin, gifting can be strictly inefficient when the cost of a gift is greater than the value a recipient places on it. A dynamic and process-driven model, in contrast, accounts for the value of the gift plus the information signaled about existing or desired relationships formed as a result of the transaction. Using a microfoundational perspective, we interpret the act of gifting as a public ritual to explain how reciprocal trust at the level of individual exchange at the relationship level becomes generalized trust at the macro level. This fits well with the *doux commerce* thesis that emphasizes the civilizing nature of markets via repeated and voluntary interactions among quasi-anonymous individuals (Hirshman, 1977: 60). From a short-run perspective, gifting can reflect inefficiencies, but when it is relationshipsustaining and embedded in public or ritual practices it creates dynamic efficiencies. Relationships make incomplete contracts more robust, increase cooperation, and extend the opportunities for trade. Smith (1976 [1776]: 26) famously describes the formation of generalized trust: 'the good offices we stand in need of' result from an appeal to others' 'self-love', and in turn extends the scope of trade and division of labor. Storr (2008: 137-138) points out that contemporary economists pay insufficient attention to the social dimensions of exchange, reducing conversations to little more than statements of bid-ask positions. In line with Storr, we believe more is necessary to sustain a market than

⁴Gifting is only one possible example of social practices appearing wasteful to economists worried about informational asymmetries and transaction costs. Our daily life is sprinkled with norms, customs, and rituals that generate waste in a purely static sense, including idle chit chat before business meetings, shaking hands, and pledges of allegiance (see Kreps, 1990). Our focus on gifting connects with the writing of Kreps (1990) and Ostrom (1990).

Waldfogel's static analysis suggests and link this insight to the dynamic benefits of gifting rituals discussed by Mauss.

Since 'gifting' has various meanings in different academic disciplines and literatures (Elder-Vass, 2020), we define our usage of the term and establish a condition limiting the scope. Elder-Vass makes an important case that a definition should not include elements of one's theory. To that end, it is important to keep the definition as unburdened as possible. We define gifting as the voluntary, unilateral transfer of a good or service from one person to another. Gift giving may involve an expectation of reciprocity as emphasized by Mauss (2011 [1954]), though that is not a necessary condition, as noted by Elder-Vass (2020: 678-679). Our simple definition includes a wide scope of activities an average person would consider gifts, including presents given during various holidays and celebrations (e.g. Christmas, birthdays, baby showers), as well as charitable activity such as donating blood, giving money to a street beggar, or contributing to a university's building fund. This definition fits well with Waldfogel's implicit use of the term.⁵ Falling outside the scope of this definition would be government-provided welfare services as the resources used to fund such services were gathered from taxpayers non-voluntarily. Admittedly, gifting can take many forms and include different obligations with respect to expected reciprocity and power dynamics. Our goal is not to provide a definitive definition of 'gift', but rather show how a wide range of gifting practices can generate dynamic efficiency in market economies based upon how well those practices correspond to a set of institutional characteristics (or design principles) that we elaborate below. Considering our thesis is positioned as a corrective to Waldfogel and others who see gifts as containing deadweight loss (in a static analysis), we believe we are in congruence with how the term has been used there.

2. Gifts, deadweight loss, and static inefficiency: Waldfogel and his critics

Nearly all individuals have received a gift that they found little value in or did not want at all. For instance, your aunt may have purchased you a ceramic statue for several hundred dollars as a wedding gift. You and your spouse considered this art piece aesthetically atrocious and would have preferred an envelope with cash. Waldfogel's (1993, 2002, 2009) reasoning about the inefficiency of gifting quantifies this lost value as deadweight loss. Waldfogel argued there is a significant spread between resources expended by a giver and the value placed on the gift by the recipient, a result of asymmetric information between the two parties about what each person values. He noted:

... an important feature of gift-giving is that consumption choices are made by someone other than the final consumer. A potentially important *micro*economic aspect of gift-giving is that gifts may be mismatched with the recipient's preferences.... While it is possible for a giver to choose a gift which the recipient ultimately values above its price – for example, if the recipient is not perfectly informed – it is more likely that the gift will leave the recipient worse off than if she had made her own consumption choice with an equal amount of cash. In short, gift-giving is a potential source of deadweight loss (1993: 1328, emphasis in original).

The implications of this analysis are straightforward: the more information the gift giver has about the recipient's preferences, particularly *immediate* needs or wants, the more efficient the outcome will be (Waldfogel, 1993: 1330). In contrast, the more socially distant a giver is from the recipient (and hence the less information they have), the greater the discrepancy between the value the recipient places on the gift and what the giver paid for it. Old married couples are expected to have higher-quality information about preferences than occasional acquaintances or distant cousins. The informational costs of gift-giving are one main source of inefficiency. Waldfogel supported his argument by surveying college students and showing that recipients place roughly 16% lower value on gifts received than what the

⁵It should be noted that Waldfogel (1993) did not provide a specific definition of 'gift', and instead chose to rely upon an implicit understanding of the term in his surveys with students.

giver paid for them, with gifts from more socially distant individuals being approximately 33% less valuable (1993: 1334). From this he concluded that cash is more efficient than in-kind presents. In a static analysis, cash allows the recipient to maximize their want satisfaction, holding the giver's expenditure constant.

Not unexpectedly, critics quickly jumped on this finding. Solnick and Hemenway (1996) noted the constrained sampling frame of Waldfogel's experiment (i.e. rich, dependent, and relatively homogeneous Yale undergraduates). They further claimed this early experiment neglected measurements of the sentimental value of receiving a gift. They pointed to research by Belk (1976) that 'many items give recipients higher utility if they are purchased by someone else' (cited in Solnick and Hemenway 1996: 1299). Sentimental value increases the total value created by the gift, producing a higher value from which any inefficiency due to poor information is subtracted. Expanding the research design to include college students, university staff, and the general public with a greater age range, they found that 'rather than a deadweight loss ... most gifts created positive value. The mean yield was, at minimum, greater than 2, and the median gift increased value by 11 percent' (Solnick and Hemenway, 1996: 1301). Another study, by List and Shogren (1998), using mixed methods seemed to support both Waldfogel (1993) and Solnick and Hemenway (1996). List and Shogren's point estimates replicating Waldfogel's study with different undergraduates generated a very mild deadweight loss of 1-2% of the gift's cash value, whereas an auction experiment demonstrated that gifts 'produced a plausible welfare gain, as real selling prices were at least 27 percent higher than the hypothetical price' (1998: 1354). It should be noted that all these studies examined gifting as a single-period event without recognizing that it is an iterated experience involving norms of reciprocity.

Waldfogel responded with a follow-up study in 2002 that expanded the sample size⁶ and set of explanatory and control variables to include race, religion, and frequency of contact between givers and receivers. He found deadweight loss to average roughly 7% of the gift's value (2002: 417). An updated study with alternative measures by Principe and Eisenhauer (2008) also found a 7% deadweight loss associated with in-kind gifts and, surprisingly, a 14% loss connected to gift cards (see also Offenberg, 2007).⁷ Gifts from more distant relatives were shown to have a greater mismatch in value as would be expected in a theory emphasizing asymmetric information. The study revealed that the categories of individuals who were more likely to give gifts with a larger spread (i.e. higher deadweight loss) were also those more likely to give cash, although cash transfers still accounted for a small fraction of giving (approximately 13.5% of all gifts). Grandparents were the most likely to give cash (59.2%), with aunts and uncles being the next most likely (25.7%). Friends and 'significant others' only gave cash about 2% of the time (Waldfogel, 2002: 418). The likelihood of giving in-kind gifts increased with regularized contact: those who were in daily contact with a recipient, and presumably knew the recipient's preferences better, only gave cash about 6% of the time, whereas those who had just yearly contact gave cash roughly one out of three times (Waldfogel, 2002: 418). Again, these results correspond with common experience and a theory based upon asymmetric-information problems.

Even though the tendency to give cash gifts increases as the giver knows less about the recipient, cash remains rare. Waldfogel attributed this to the cultural stigma of giving cash. The nature and enforcement of this stigma was not theorized but inferred from the measured gap between those who should be giving cash because of their infrequent contact with the recipient and the fact that they give in-kind gifts (Waldfogel, 2002: 421–426). Potential motivating reasons for giving in-kind gifts beyond cultural pressure to avoid the stigma of giving cash include 'altruism, exchange, and paternalism':

⁶Waldfogel's 1993 article had N = 246, whereas the 2002 study increased the sample size to 2,400.

⁷This is surprising considering gift cards are closer to cash than in-kind gifts, thereby reducing (but not eliminating) the asymmetric-information problem; the deadweight loss associated with gift cards should be lower than gifts, not higher. Offenberg's (2007) study saw losses between gift cards and in-kind presents to be comparable but relied upon Waldfogel's higher estimate of deadweight loss from 1993. Principe and Eisenhauer's (2008) estimate of deadweight loss from in-kind gifts was comparable to Waldfogel's (2002) later estimates.

Altruistic givers derive utility from the utility of their recipients and do not condition their transfers on recipient behavior. Exchange-motivated givers make transfers in exchange for services. Finally, paternalistic givers derive utility from their recipients' consumption and therefore seek to affect their recipients' consumption patterns. A natural means of doing so is to give gifts in kind, rather than in cash, thereby making it costly for the recipient to consume something other than the gift (Waldfogel, 2002: 426).

The paternalistic motivation presumably requires monitoring of the in-kind gift's use, implying it is either for immediate consumption in the presence of the gift giver (e.g. eating a fruitcake) or for regularized consumption where the giver can observe its use (e.g. wearing a sweater to family gatherings). Paternalism produces an asymmetric effect. The giver is likely to further increase their value from gifting (Brennan and Walsh, 1977, 1980), while the value of information the giver can obtain about the recipient's preferences erodes (if they do not outright disregard the recipient's preferences), lowering the value to the recipient. Immediate consumption would not seem to guarantee the change in long-term behavioral patterns that paternalism usually suggests; a paternalist does not want to modify behavior just once, but on an ongoing basis. Paternalist gifting thus suggests some degree of monitoring and more likely comes from those in routine contact with the recipient. Distant acquaintances giving paternalistic gifts do not know whether their efforts were successful given their lack of contact. Moreover, those with little knowledge of the recipient do not know whether the recipient needs to be 'nudged' into 'better' behaviors. It is plausible, though, that the giver could imagine (or hope for) regularized use if not able to monitor behavior directly.

While admitting it is empirically difficult to disentangle altruistic from exchange-based motivations (given data limitations), Waldfogel (2002) posits that '[o]n its face the low frequency of cash gifts is evidence of paternalistic motivations for giving ... if the givers were primarily concerned with recipient utility, they would give cash, allowing the recipients to make utility-maximizing choices' (416). However, he finds that since 'cash gifts are more likely from the sorts of givers who would be expected to give unwanted noncash gifts, the decision to give cash thus appears to reflect givers' concern for recipient utility. In other words, the giving in this sample does not appear to be paternalistic, despite the low frequency of cash gifts' (426). If this inference is true, that leaves altruism and exchange as the more dominant motivations.

It is conspicuous that the gifting-as-exchange thesis is not explored further by Waldfogel since exchange is a cornerstone of economic analysis. Smith (1976 [1776], book I, chap. 2) observed early on that we are a species that loves to truck, barter, and exchange. But Waldfogel's survey research and his critics' follow-up studies never probed whether the recipients of gifts intended to reciprocate or whether the gifts they received were given in response to presents they had given others; all these studies analyzed 'one-shot' events in which the subjects were *only* recipients. But exchange by its very nature is reciprocal. While we acknowledge that gifting certainly generates deadweight loss in the short-term, the 'burnt offering' component is a sacrifice that creates an opportunity for relationship. When it is reciprocated in an iterated exchange, becomes publicly visible, and is ritualized in ceremonial behavior, it can enhance welfare for society in the long-term through its promotion of generalized trust. It is the repeated, ritualistic, and public nature of gift giving that we turn to next, a feature that helps to explain the institutional endurance of this supposedly 'wasteful' cultural practice.

3. A Mauss tale: institutional endurance and ritualized practice

If gifting is a major source of social inefficiency, economists face two puzzles: first, why has the practice endured for so long? Second, why has it been common across widely disparate cultures? Gifting is a near-universal institution, an observation made by Marcel Mauss (2011 [1954]) nearly a century ago. Mauss's interest was to explore exchange in 'primitive' societies, ranging from Melanesia to ancient India, and medieval Germany where no formal monetary exchange occurred. But this cultural institution exists even in the most-advanced market economies, which lends credence to Mauss's claim of

its universality. Beyond Christmas, there are numerous holidays where gifts are given – for example, Hanukkah, Kwanza, Eid al-Adha, Raksha Bandhan, and Chinese New Year. Birthdays, bridal showers, and anniversaries are common cultural gifting moments as well. Add to this everyday gift-giving such as bringing a bottle of wine to a party, a welcome basket to new neighbors, or small presents that begin business negotiations (common in Japan). If gifting was inefficient as Waldfogel claims, why would this cultural institution exist so ubiquitously and resist replacement? In a static sense, Waldfogel is right. In the dynamic sense, however, we would expect many aspects of gifting to be selected out of the set of institutional options via some evolutionary mechanism (Alchian, 1950).⁸

Mauss's take on gifting is relevant here, as he viewed such customs as a *nonmarket* form of exchange. Gift relationships existed *prior to* the formalization of exchange in 'primitive' societies. Mauss did not define market exchange explicitly, although his understanding of gifting indicates that market transactions involve *voluntary* exchange that benefit both parties (i.e. produce gains from trade). Gifting, in contrast, involves 'prestations⁹ which are in theory voluntary, disinterested and spontaneous, but are in fact obligatory' (2011 [1954]: 1). The obligatory nature is important. Something is obligatory when it forms normative expectations beyond a simple quid pro quo transaction. An individual feels obligated to give (and reciprocate) based upon cultural norms and a desire to maintain a solid reputation within a community. Those who fail to participate in the office white elephant gift exchange or bring wine to dinner parties will soon find themselves ostracized from the group. Following such rituals signals an individual wants to be a member of some network, be it social or commercial.

Mauss's most noteworthy illustration – the Melanesian *kula* – reveals the linkage to commercial transactions and points to several other key features common to many institutional gifting rituals. The *kula* was a 'whole system of inter-tribal and intra-tribal commerce' (Mauss 2011 [1954]: 19). It 'is distinguished from the straightforward exchange of useful goods' and 'like the American potlatch, consists in giving and receiving, the donors on one occasion being the recipients on the next' (20). The main *kula* ritual involved gifting only, but during 'the lesser *kula* ... the sea voyage also serves an opportunity for exchange of cargoes; the nobles themselves do business; numerous objects are solicited, demanded and exchanged, and many relationships are established in addition to *kula* ones; but the [main] *kula* remains the most important reason for the expeditions and the relationships set up' (20–21). It is important that this gifting is associated with trade not only among the elite, but all members of society as 'all *kula* transactions are an opportunity for ordinary exchange ... *which does not necessarily take place between established partners*' (25, latter emphasis added). Here we see the importance of building connections between quasi-anonymous individuals not directly tied to explicit trade relationships but could potentially be partners later.

The *kula* signified a desire for formal relationships between tribes on neighboring islands and involved intricate procedures of presenting gifts via prescribed methods (i.e. rituals) that were obligatory. The specific rites associated with the *kula* were ornate and often involved 'non-utilitarian' gifts (e.g. shell jewelry). Failure to abide by the ritualistic norms signaled that the giver or recipient was not acting in a trustworthy manner and may have been harboring ulterior motives (Mauss, 2011 [1954]: 18–27). Given the possibility that wealth-destroying raids and war could break out easily between rival tribes, gifting rituals served to signal information about one's future intentions and a willingness to sacrifice wealth for the sake of peace and prosperity (see also Leeson, 2014a). Sacrifice was important in reducing the uncertainty that was ubiquitous in those societies. A willingness to 'burn resources' in the present was akin to posting a bond to deliver on one's promises in the future. The ritualistic nature of gifting also emphasized the importance of iteration; repeat play sets expectations and reduced uncertainty. Breaks in the pattern raised suspicions and hinted at future conflict.

⁸The introduction of monetized gift cards, an option between cash and tangible presents, may be an example of evolutionary drift away from in-kind gifting.

⁹Mauss uses this archaic term to indicate 'offerings' (or gifts).

In addition to the sacrificial component of the *kula* and similar practices, Mauss observed how rituals developed to foster the reciprocal nature of gift exchanges. These rituals were publicly observable allowing participants to express a willingness to give and receive graciously. This bolstered broad social trust because even if an individual was not involved in a specific gift exchange, they would witness others making sacrificial offerings. And gifting required not only returning sacrifices in kind, but also a willingness to accept the gift (even if one had no use for it): 'Total prestation not only carries with it the obligation to repay gifts received, but it implies two others equally important: the obligation to give presents and the obligation to receive them' (Mauss, 2011 [1954]: 10–11). Refusal to accept an offering threatened to unravel the gifting process and stir doubts about someone's intentions, raising uncertainty, dampening trade, and possibly resulting in conflict.

The *kula* example reveals that the norm-based *process* of gifting has value beyond the static utility (or disutility) of any particular gift received. The sacrificial, reciprocal, public, and ritualistic, components of gifting institutions serve to lower one of the most common transaction costs within an economy: uncertainty. Our theory of gifting emphasizes how congruent expectations reduce uncertainty, promote peaceful association, build extended social networks, and create social order irrespective of the deadweight loss generated in the short term. Mauss's analysis shows how these benefits emerge from a social context rather than through top-down legal and political changes. We now turn our attention to situating gifting within the broader institutional framework needed to reduce uncertainty and promote economic exchange.

4. Trust and transactions: from the gift relationship to generalized trust

As Mauss reveals, gifting is a robust social mechanism useful for reducing uncertainty, minimizing conflict, and extending relational networks. In this way, the emergence of trust precedes commercial transactions. But why would this be? Alas, Mauss does not tackle this question in depth. An economic approach provides insight. To understand why gifting may enhance commercial efficiency, recall Smith's (1976 [1776]) basic formula for economic prosperity: the wealth of nations is determined by efficiency gains from the division of labor, which in turn is conditioned upon the extent of the market. Extending the market (i.e. expanding trade) is tricky. As the market expands, trade becomes more quasi-anonymous; the more people we know and interact with, the less we tend to know about them. Dunbar (1998) argues that humans can only know the intimate details of no more than roughly 200 other individuals. Beyond that, it becomes increasingly difficult to tell whether any one person will engage in trade honestly or intends to cheat us. Indeed, uncertainty represents one of the most significant transaction costs within a market economy; if I am uncertain whether I can reap the rewards of my effort and will be treated fairly and honestly by a trading partner, I have less incentive to truck, barter, and exchange. If reciprocal trust is required for trade, markets will be extremely limited. Reducing uncertainty in quasi-anonymous markets to a level requires generalized trust, which is necessary for an economy of any size to hum along efficiently (Fukuyama, 1995; Munger, 2018).

Smith (1976 [1776]) innately understood the need for promoting certainty and trust within an extended market when he argued that production and exchange required 'a well-governed society' (22). Scholars since Smith's time have noted the importance of well-specified property rights and other institutions that alleviate uncertainty. Institutional political economists have devoted substantial attention to the role of government and other formal structures designed to alleviate uncertainty. From constitutional contracts (Buchanan, 2000 [1975]; North and Weingast, 1989) to laws reducing information asymmetries (Akerlof, 1970; Grossman and Stiglitz, 1980), government is seen as providing rules and enforcement that reduce uncertainty and allow humans to interact predictably and peacefully. Recently, though, attention has shifted toward the study of culture and community self-governance (as opposed to government) that provide norms and rituals that harmonize social interaction within civil society (Brennan *et al.*, 2013; Ellickson, 1991; Leeson, 2014b; Ostrom, 1990, 2000; Skyrms, 2014 [1996]). Norm-based forms of social governance existed prior to, and often have outlasted, all the formal legal structures (i.e. government) that we are familiar with today (Gill, 2021).

Moreover, norms and rituals account for the vast majority of the rules determining our daily social interactions (Bicchieri, 2006).

Cultural rituals and norms assist in economizing on informational costs by creating simple heuristics, or 'shared mental models' (Denzau and North, 1994). In behavioral psychology, these models (or heuristics) are the working knowledge of cause and effect that guide individual action (Simon, 1955). In some areas the actor will be relatively proficient with details necessary to make informed choices. For other choices – ones that are infrequent or rely upon expertise the chooser does not possess – choices still must be made, including deciding whom to trust in a commercial interaction. The economics of information literature suggests that people are willing to sacrifice value to forgo search as uncertainty increases (e.g. Stigler, 1961). When traveling abroad, we seek out trusted information, perhaps from a concierge, on which restaurants to visit or vendors to patronize. This lowers the cost relative to investigating a wide range of restaurants and vendors individually. If the hotel has a trusted brand name to protect, we can assign greater credibility to the concierge's recommendation. The concierge is a useful institution when it reduces uncertainty and facilitates commercial exchange.

Gifting is similar. By extending individual relationships, information about the quality of heuristics increases. Assuming bounded rationality, we seek to economize on all the costs associated with both the selection and increasing quality of those heuristics. Public gifting rituals are a proxy for this selection process because they extend relationships with those whose heuristics have more credence; if we observe others participating in gift exchanges, we can infer that they are willing to engage in sacrificial behavior just as we do. Not all people who engage in reciprocity act according to high-quality heuristics, but on average individuals engaged in multiple-round games of reciprocity possess heuristics that are higher than average quality compared to those used by individuals making idiosyncratic or random choices. A restaurant that hangs Christmas decorations might simply be engaging in relatively low-cost signaling, but signaling at any positive cost is a better indicator of average quality than no signal at all. A more formal heuristic can be provided by clearinghouses such as travel guides or customer-satisfaction rating systems (e.g. Yelp), but such services are specific to the individual and business; they do not convey the generalized trust that quasi-anonymous trade requires. Moreover, gifting rituals long preceded the information technology such modern clearinghouses rely upon. Indeed, gift giving may be the first institution that served to send signals about the trustworthiness of others.

Another means of alleviating uncertainty involves selecting good cooperators over time via repeated interactions. Developments within game theory illuminate how this works. In a simplified format, human interactions (including trade) can be modeled as a cooperative endeavor and structured as a prisoners' dilemma.¹⁰ While it would behoove both parties to exchange honestly and fairly, it is in the interest of either party to cheat while the other party behaves honestly. For instance, two parties may contract to exchange 10 bolts of fine linen for a barrel of 12-year-old scotch. The scotch, however, may have been aged only 5 years and the cloth woven of inferior material. At the time of exchange, it is difficult for either party to detect whether the other merchant has violated the negotiated contract. They might have recourse to judicial institutions to rectify this injustice. However, litigation is time consuming and financially costly, and results uncertain. The judicial system may also be untrustworthy, rife with corruption and rent seeking. Such concerns – the potential for cheating and costly litigation – diminish the likelihood of trade; the extent of the market shrinks, and social welfare stalls or declines.

Offering solutions to the prisoners' dilemma is an academic cottage industry. One of the most popular solutions involves repeated play. Playing a tit-for-tat strategy in an iterated game can account for cooperation over time so long as each party has a sufficiently extended time horizon (Axelrod and

¹⁰The prisoners' dilemma is not the only way to model games of cooperation. Assurance (or coordination) games are also used. However, the prisoners' dilemma is the more difficult problem to solve given the incentive structure encouraging defection. If one can design an institution to promote cooperation in the prisoners' dilemma, such a solution will likely work in games with less incentive to defect.

Hamilton, 1981), an outcome predicted by the folk theorem (Friedman, 1971). Iteration among the same trading partners creates a thick cultural network of information, also known as 'bonding capital' (Granovetter, 1973). Trade historically occurred among individuals within closed tribal networks who knew each other well (Greif, 2006). Iteration within thick social settings generates more information about quality, lowers transaction costs associated with uncertainty and information gathering, and provides some ability to cover unarticulated parts of contracts.¹¹ If mistakes can be expected to occur in an exchange, it is important to know in advance that your trading partner will graciously fix those errors at their expense. Thick networks contain more information about the graciousness of others. Unfortunately, thick networks tend to limit the extent of the market (and hence prosperity), particularly if individuals are wary of trading with people outside their immediate tribe (Greif, 2006). Trade and prosperity require trust in thin networks characterized by infrequent interactions with (quasi-)anonymous others.

Broad cultural gifting traditions that are publicly known build thin-network trust by demonstrating repeated sacrificial exchanges. When we see many others merrily purchasing, wrapping, and exchanging gifts during the holidays (or other gifting events), and doing so on a regular basis, we can assume that most others in society are acculturated into the norm of sacrificing resources for the sake of others and graciously accepting those sacrifices when offered to them. Gifting rituals represent a manifestation of the folk theorem played extensively throughout societies. Although the laboratory experiments on iterated cooperative play often involve the same (sometimes quasi-anonymous) players, publicly visible gift-giving implicitly signals individuals are choosing to cooperate in a game in which they expend resources and potentially create static deadweight loss. Gifting, in other words, is the folk theorem lived daily; we learn to be trustful in commercial interactions by playing out a seemingly wasteful game. Again, it is the iterated *process* of gifting that is more valuable than the actual gifts themselves.

5. Design principles for dynamically efficiency gifting

Gifting as a cultural institution is uniquely situated to build trust and fosters dynamic efficiency. That there is variation in how this cultural institution emerges across time and space is no surprise. The main feature that makes these practices alike is the way that reciprocal trust is fostered and the extent to which it results in generalized trust at the societal level. In this section we argue that how the gifting institution is 'designed' determines the extent to which it can promote generalized trust. We use the concept of 'design principles' that was popularized by Ostrom (1990) when discussing cultural institutions that solved a variety of common pool resource (CPR) problems. For Ostrom, a design principle is 'an essential element or condition that helps to account for the success of these institutions in sustaining the CPRs and gaining the compliance of generation after generation of appropriators to the rules in use' (1990: 90). This does not necessarily mean institutions are designed *intentionally* for specific purposes. Intentional design is possible, but when considering social norms and rituals, we take a more 'Austrian' perspective on cultural institutions noting that some actions taken by individuals to resolve certain situations can become embedded in customs that evolve over time (Hayek, 1979: 153–169; Smith, 2015). Many of the cultural institutions that Ostrom examined emerged over time, often without explicit conscious intent.

¹¹The literature on contracts notes that there are both covered and uncovered costs in exchanges. The latter represent unanticipated mishaps, delays, and other unforeseen problems that add to the total cost of trade. How trading partners distribute uncovered costs impacts whether further trade will occur. If one party is seen as largely responsible for the unanticipated costs yet refuses to accept some of the financial burden created, the other party may terminate future interactions under the impression that she is dealing with somebody who is unforgiving and untrustworthy. If, however, the party generating the costs takes responsibility and discounts the cost to the other by absorbing some, or perhaps all, of those costs, the other party will be more likely to continue the relationship. This is the reason many successful retailers offer 'no questions asked' return policies. While one might expect consumers to use such a policy opportunistically, the practice seems to result in a high level of consumer confidence and quality assurance (Matthews and Persico, 2005). In many respects, a 'no questions asked' return policy represents a gift to consumers.

Although Ostrom was concerned with managing the tragedy of the commons, the design principles concept can be applied to other institutions. In our case, we are interested in how four key elements – sacrifice, reciprocity, public visibility, and ritual – assist in promoting generalized trust, the outcome that makes gifting dynamically efficient. The first two features enhance the heuristic function of gifting, whereas the latter two emphasize the iterated process of trust building necessary for thin markets to work. The more that each of these design principles is at work in any specific gifting practice, the more that custom will enhance social trust and lower the transaction costs associated with quasi-anonymous trade. We consider the first one of these principles – sacrifice – to be a necessary condition of dynamically efficient gifting as it is the primary heuristic signal that a person can be trusted. The other three conditions vary across gifting practices and determine the extent and effectiveness of the custom in generating broader levels of trust and economic integration. We now examine each of these design principles in greater length.

5.1 Sacrifice

An effective means of determining trust among individuals whom you know little about is to see whether they are willing to sacrifice resources up front to establish a long-term relationship. A large, fixed cost only makes sense when it lowers the average cost through repeated interaction. Iannaccone (1992) recognizes this with respect to individuals wishing to become members of religious groups and other clubs. Such clubs face a basic collective action problem when it comes to securing voluntary cooperation among members. To the extent that such groups provide important public (or club) goods to members, there is an incentive to free ride on the efforts of others, thereby reducing the group's overall performance. Requiring odd initiation rituals and other costly behaviors filters out free riders; those willing to pay a high price (i.e. sacrifice) can be trusted to be good cooperators in the future. We see this too with engagement rings, wherein the 3 months' salary used to purchase a symbolic rock serves as a signal that the suitor is committed to a long-term relationship for better or for worse (Brinig, 1990). Leeson (2014a) examines the extreme case of human sacrifice to show how it was used by the Konds in India to signal a long-term desire to avoid warfare between tribes. And the Bible is filled with instances of sacrificial offerings such as the burnt offering standing in place of the forgone child sacrifice by Abraham of Isaac (Genesis 22). Sacrificial offerings are common across all religious traditions and societies.

Even if the received gift is below the price the recipient would have paid, the grateful recipient understands that the giver sacrificed resources and appreciates the effort to signal a desire for an ongoing relationship. There is a subtle message contained in a gift that tells the recipient that the giver is willing to sacrifice resources to provide future aid should the need ever arise; people who are sacrificially generous with one thing are often generous with other things, including their time and care. Showing up with flowers on a date isn't the same as an all-night vigil in the hospital, but if you can't be bothered with flowers, what else is missing? Additionally, a giver's small sacrifices might increase the recipient's reciprocal good will and assistance when the giver finds themselves in dire straits. This sort of message is critical in a world of incomplete contracts where unanticipated contingencies arise that require (re-)negotiation. Honoring or sincerely renegotiating a contract that could technically be breached might promote trust and loyalty. This type of cooperation forgoes short-run opportunities to defect. We want to enter into contracts with individuals who absorb costs to correct errors and are generous enough with their time and resources to make things right. Of course, an ungrateful recipient who doesn't understand the sacrificial nature of the gift might see the gift as a sign that the giver does not fully understand their preferences and thus becomes more likely to be excluded from future interactions; that possibility always exists and arises from a view that sees the world in static terms. Such an unappreciative world is incompatible with endogenously arising cooperation.

5.2 Reciprocity

None of the economic studies critiquing Waldfogel's static analysis of giving considered that the recipients might be involved in ongoing relationships of receiving and reciprocating. The thinly rational response of expected reciprocity multiplies the deadweight loss. Not only do you undervalue the gift by 7% on average, but you destroy an additional 7% of value by giving an underappreciated gift in return. And then you do it all over again next year! But if a gift received by one of Waldfogel's survey respondents was actually given in response to a gesture made previously, the value of the item received wasn't merely the item *per se* but should include the acknowledgment that the other person was thankful enough to recognize their previous gift. Perhaps humans place no value on reciprocity and graciousness, but then why do we have such strong social norms about saying 'thank you' for services rendered and gifts received? If in-kind gifts generate deadweight loss, it would be like saying that 'thank you' represents inefficiency in rhetoric.

Reciprocity is important in human relations. It is how we learn about one another, share in the gains from trade, and build networks of trust. Reciprocal trust, like Mauss's gift relationship, initiates, replicates, and extends the trust relationship. It precedes the generalized trust that explains the extended order. Reciprocal trust is 'direct exchange ... [wherein] the exchange is of goods which are of roughly commensurate utility and reciprocation must be made upon or shortly after receipt' (Taylor, 1982: 29). While Taylor likens this to normal economic trade (e.g. purchasing donuts), it can be applied to conventional forms of gifting particularly when there are normative expectations of reciprocation. With generalized reciprocity 'the transactions are "putatively altruistic", the obligation to reciprocate is vague and diffuse, and the altruism is not conditional upon reciprocation. There can be sustained one-way flows, if the recipient is in a difficult position.... Nevertheless, the altruism involved here is normally reciprocated' (29). Taylor considers both forms of reciprocity, particularly the generalized category, to be essential in building trust and maintaining social order in small communities (30). Within large societies, generalized reciprocity manifests itself by individuals offering unrequited help to others in need under the expectation that they too will be assisted in times of need without being expected to offer direct compensation for the assistance. We give to others in society not necessarily in the expectation that we are compensated immediately by the direct recipients of our gift, but with the belief that others will give to us under similar conditions.

Gifting involves both types of reciprocity, particularly when the practice is publicly visible and ritualistic. The level of balanced reciprocity depends upon the specific norms surrounding different gifting rituals. Balanced reciprocity is common in celebrations involving gift exchanges such as 'white elephant parties' held in many offices around Christmastime. Rounds of drinks among friends after work constitute a less formal, but potentially ritualistic, form of balanced reciprocity that tests one's commitment to, and trustworthiness within, the group. The 'friend' who fails to meet his obligation eventually finds himself no longer included in social activities. Movement away from purely balanced reciprocity often occurs where status, wealth, and power differentials exist. Some of the hardest questions about giving center on the complexities of unbalanced reciprocity. Our convergence to stable expectations between groups points to the relationships that define such imbalances. Parents who gift their child a bicycle for a birthday do not expect something equal in return, but a display of gratitude is often expected. Employers offer bonuses and sponsor holiday parties not with the expectation that the employees reciprocate in kind, but in an effort to show appreciation above and beyond contracted compensation and with the hope that the workers will remain loyal and productive.

In addition to involving balanced reciprocity between individuals in an exchange, gifting also involves the promotion of generalized reciprocity, particularly when it is combined with the ritualistic and public nature of holidays. Even if we do not directly engage with individuals, we see the practice of gifting practiced broadly in our society thanks to the ritualistic and public nature of many of our sacrificial rituals. You are not expected to give gifts to every person you may someday interact with, but you are expected to exchange gifts with somebody. We learn that giving sacrificially is an important feature of human relations, and we understand in times of duress we may expect the kindness of strangers. It is not that we will necessarily repay the passing motorists who stop to help us with a flat tire (although we may), but it is understood that if generosity is widespread throughout society, we owe it to others to assist them at our expense. People return lost wallets stuffed with cash knowing (or hop-ing) that another stranger would return theirs if lost (Cohn *et al.*, 2019).

5.3 Public visibility

For a signal to go from private information to shared heuristic, it needs to be visible. Gifting between two face-to-face individuals is bilateral and easy to establish. However, for reciprocal trust to become generalized trust capable of facilitating market transactions among quasi-anonymous strangers (thin networks), it is important that people 'see' individuals giving to one another even if they are not involved in the gift transaction. While the immediate image of gifting is two people privately exchanging wrapped boxes, in reality much of our gifting is publicly known. Granted, I do not know exactly what my neighbors are gifting to one another, but I easily can ascertain they are gifting because they participate in public holidays in which gifting is a central component – for example, Christmas, Hanukkah, and Valentine's Day. The potlatch celebrations that Mauss discussed were events held openly so that all villagers could see gift-giving occurring. And our many gifting holidays are celebrated with decorations and festivals that make them highly visible. While we might not know whether any particular person is gifting, the public nature of many of our gifting holidays assures us that a wide swathe of the population is infused with the spirit of sacrifice and reciprocity.

Even gifting celebrations that are not communal holidays (e.g. birthdays, anniversaries) have a public component. While we might not know the date of any specific person's birthday celebration, we know that birthdays are widely celebrated with gifts, particularly those of children who must be taught the importance of giving and graciously receiving. Our cultural knowledge that individuals bring host gifts to parties and friends buy rounds of drinks for one another also adds to our vision that gifting is widespread in society. These gifting ceremonies impart a general attitude of trust that extends to many other informal practices necessary for the extended order. If at any time I engage in a quasi-anonymous transaction, my probabilistic guess is that I am dealing with someone who participates in the general gifting culture and my heuristic says that it is probably good to trust that person. Public gifting rituals provide the visible smoke for our burnt offerings. They bring us closer to those we don't know well by connecting us with a common cultural practice. When people know that others are involved in sacrificial giving, trust develops, networks expand, and markets flourish.

5.4 Ritualistic

Closely related to the issue of public knowledge is the issue of ritual. Gifting is often associated with holidays that occur at specific times of the year and involve numerous other seemingly irrelevant (and costly) practices. At Christmas, we not only give gifts, we send greeting cards, wrap presents with bows, and adorn our houses and businesses with festive decorations. So too with Valentine's Day, Halloween, and birthdays, each of which has its own set of customs - hearts, costumes, and cakes! These customs serve to make the practice of giving more visible. The house that blinks with a thousand twinkling lights in December is likely one where people gather to exchange wrapped boxes. This telegraphs who is actively participating in the broader social norms and with what degree of enthusiasm. Businesses that paint their windows with Santa in December or ghosts in October are those that tell their customers that they participate in the public sacrifice of resources. No business need decorate its establishment with ornaments, and it often comes at a cost to the bottom line (making statically focused Scrooge-like economists cringe), but doing so tells each passerby that they are part of the broader community that celebrates joyfully; the business tells the world that it wants to be part of the community and be trusted. If it wants you to know that it won't try to keep every last vestige of the gains from trade to itself, but rather will share in the good fortune of exchange with others, there is no better way than to roll out the garland.

Beyond adding to the visibility of gifting, ritual promotes iteration. Ritual works precisely because we perform the same actions repeatedly (i.e. ritualistically). The use of specifically designated times reinforces the formality of the act. Moreover, repeated celebration reinforces the lessons of gift-giving. We learn bit-by-bit about the generosity of those around us. And when combined with the public aspect of our gifting holidays, gifting becomes the folk theorem lived socially. Most game-theoretic explorations of iterated play involve the same subjects interacting over and over again, rarely connecting beyond those invited into the experimental lab. That is helpful if you only interact with those individuals, but we live in a world of intermittent contact with the players of the real game. Rituals, particularly highly visible ones, extend the iterated game to the world of quasi-anonymous strangers. Year after year, at Christmas and birthday parties, we play tit-for-tat with one another and observe others involved in the same game even if we don't play with them directly. The shared social traditions observed in various giving rituals remind us we are part of a larger network of people – most of whom we don't know – that share a common heritage of generously giving and graciously receiving. Trust, necessary for extended markets, grows from this.

It is the combination of sacrifice, public visibility, ritualistic customs, and reciprocity that makes gifting such an effective heuristic device for building and maintaining thin-network interactions, a cold, academic way of acknowledging Smith's (1976 [1759]: 78–82, passim) warmer theory of beneficence. It is difficult to directly observe the trustworthiness of any given individual in society, but if there is common knowledge that the vast majority of people in society engage in gifting rituals, we can make simple probabilistic calculations that most people we meet will honor contracts or correct errors if they arise. That we continually emphasize the importance of giving and gracious receiving is an iterated reminder of how people unknown to us are not enemies seeking us harm but individuals who can work together with us to build a more prosperous and peaceful society.

6. Conclusion

Institutional economics offers explanations for some of the solutions to the basic problems of social cooperation and coordination. This becomes more important in the context of proposed policy solutions that alter incentives and improve social well-being. Such policy prescriptions frequently center around government interventions involving top-down mandates. But often the solution to these problems can be found within the traditions, norms, and rituals of civil society that allow individuals to engage in community self-governance (Goodman and Herzberg, 2020). Ostrom (1990) most recently popularized the approach of taking culture seriously and looking at what may seem to be mundane, irrelevant, or even odd social practices and understanding them in their broader socioeconomic context. We place ourselves within that growing institutional literature. Gifting, we argue, is one practice that may appear odd from a thinly rational neoclassical perspective, but when understood as providing a trust heuristic that is embedded in iterated public rituals, it should make us appreciate the importance that frivolous folk practices serve in generating social prosperity.

Our goal here has been to reframe the way we understand gift-giving and challenge narrow neoclassical economic conceptions of gifts that ignore their broader institutional importance. Gifts may produce static inefficiency. *Gifting* generates dynamic efficiency. This difference is critical to understanding the particular institution of gift-giving as well as many other human actions that appear odd and unproductive (e.g. Leeson, 2017). Process matters. The process of producing, giving, and receiving generates a value that often increases the value of the artifacts presented and/or exchanged. Not all gifting practices work similarly to generate dynamic efficiency. We have argued that the more a particular practice involves each of the design principles laid out above, the more it will promote generalized trust, which is an important lubricant of efficient markets and social flourishing.

While reconceptualizing gifting as a cultural method of promoting dynamic economic efficiency is an important first step to understanding this ubiquitous institution, our work here suggests several empirical research directions worth pursuing. The first obvious path is to evaluate different gifting practices with respect to how well they promote generalized trust and dynamic efficiency. Not all gifts perform the same function. Some gifting practices are very public, ritualistic, and involve strong norms of reciprocity (e.g. Christmas). Others do not (e.g. handing a homeless person money in private). Some traditions involve sacrificial 'burnt offerings' (e.g. engagement rings) whereas other gifting occasions are more practical (e.g. baby showers with gift registries).¹² Building an empirical index to

¹²The engagement ring *versus* baby shower comparison is very useful to think about. In the former situation, one member of a couple is purchasing a high-value, relatively impractical item to signify a willingness to sacrifice 'until death do one part'.

measure the presence and intensity of the various design elements and then comparing that against measures of trust would be a useful next step in this research agenda.

Another implication of our conceptual framework is that different cultures will have varying levels of generalized trust depending on how different gifting practices are embedded in their societies. Nations with more public and sacrificial gifting rituals involving reciprocal norms should have more extended markets involving quasi-anonymous trade and higher overall levels of trust than those that do not, ceteris paribus. This would be another variable scholars interested in economic development and flourishing could consider in their explanatory models. We are not claiming that gifting is a primary factor influencing growth, but it might be worthy of consideration. Numerous scholars have pointed out that the field of development economics has a blind spot to cultural norms and institutions (Greif, 2006; McCloskey, 2007; Mokyr, 2016; Ostrom, 1990, 2000). This article represents a contribution to that literature.

Beyond cross-cultural comparisons, our design principles approach suggests that extant gifting institutions can be studied based upon how they evolve over time. The concern that holidays such as Christmas have become increasingly commercialized offers a unique opportunity to determine whether some of the sacrificial and public aspects of the holiday have eroded over time and affected the level of trust. Riots over Cabbage Patch Dolls and flat screen TVs on Black Friday don't seem very congruent with the original 'spirit of the season' we see painted in Charles Dickens' *A Christmas Carol.* We might also consider the rise of 'harvest festivals' promoted as an alternative to Halloween by evangelical Christians in the United States as another test to see how new giving rituals are born and can be maintained (Rivera, 1998).

Testing the implications of our framework will be admittedly tricky. Devising measures to tease out degrees of sacrifice, reciprocity, publicness, and ritualism requires intellectual creativity. And while measures of generalized trust do exist, there is significant debate about their validity and reliability (Reeskens and Hooghe, 2008). Add to this the difficulty in identifying the wide array of gifting practices across cultures, many of which may be invisible to the outside observer (Elder-Vass, 2016). Institutions can take on many subtle forms and something as broad as 'gift-giving' may not manifest itself in ways that are easily observable. Nonetheless, the task presents itself as a rewarding research possibility as the pursuit of interesting questions should not be determined by our data availability. One method of circumventing some of the difficult field measurement problems is experimental design where our suggested gifting design principles can be manipulated in a controlled environment.

All told, institutional economics benefits from expanding our horizons to consider the cultural institutions that exist around us daily. Moreover, it is important to consider such cultural practices not only upon their ability to deliver static efficiency, but rather to think deeply about what dynamic processes they bring to society in ways that promote social and economic flourishing.

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Baby showers, alternatively, involve a very practical transfer of resources to an individual who likely has a high need for specific items (e.g. infant clothes) yet cannot afford them.

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